

NOTICE INVITING TENDER (NIT)

FOR

**DESIGN, ENGINEERING, SUPPLY, ERECTION,
TESTING, & COMMISSIONING OF NEW 5X200 kWh
CAPACITY BATTERY ENERGY STORAGE SYSTEM
(BESS) ALONG WITH ALLIED EQUIPMENTS AND
WORKS**

ON

TURNKEY BASIS

IN

BSES YAMUNA POWER LTD.

NIT NO CMC/BY/20-21/RB/SV/29

Due Date for Submission: 11.01.2021, 15:00 HRS

**BSES YAMUNA POWER LIMITED (BYPL)
CONTRACTS & MATERIALS DEPT.,
SHAKTI KIRAN BUILDING, KARKARDOOMA,
DELHI-110032
CIN: U40109DL2001PLC111525
WEBSITE: www.bsedelhi.com**

This document is a property of BYPL. This is not transferable and shall not be used for any purpose other than, for which it is supplied.

INDEX

S NO	DOCUMENT DESCRIPTION	PAGE NO
VOLUME – I		
1	INFORMATION TO BIDDER (ITB)	1 To 15
1.0	APPENDIX I	1 To 9
1.1	FORMAT FOR EMD BANK GUARANTEE	
1.2	BID FORM	
1.3	ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT	
1.4	SCHEDULE OF CLARIFICATIONS/DEVIATIONS	
1.5	VENDOR CODE OF CONDUCT	
1.6	TECHNICAL BID SUBMISSION CHECK LIST	
2	GENERAL CONDITION OF CONTRACT- SUPPLY	
2	GENERAL CONDITION OF CONTRACT- ETC	1 To 12
3.0	APPENDIX II	1 To 7
3.1	FORMAT FOR PERFORMANCE BANK GUARANTEE	
3.2	BENEFICIARY'S BANK DETAIL WITH IFSC CODE	
3.3	FORMAT OF WARRANTY/GUARANTEE CERTIFICATE	
3.4	SUMMARY OF COMMERCIAL TERMS AND CONDITIONS	
VOLUME – II - PRICE BID FORMAT		1 To 4
VOLUME – III – TECHNICAL SPECIFICATIONS		1 To 27

VOLUME – I: INFORMATION TO BIDDER (ITB)

SECTION – I: REQUEST FOR QUOTATION

1.00 EVENT INFORMATION

- 1.01 BSES Yamuna Power Ltd (hereinafter referred to as “**BYPL**”) invites sealed tenders in 2 envelopes for establishing Rate Contract from reputed manufacturers valid for a period of one year.

Sl. No.	Item Description	Estimated Cost (₹)	Cost of EMD (₹)	Delivery & Installation at
1	DESIGN, ENGINEERING, SUPPLY, ERECTION, TESTING, & COMMISSIONING OF NEW BATTERY ENERGY STORAGE SYSTEM ALONG WITH ALLIED EQUIPMENTS AND WORKS ON TURNKEY BASIS AT VARIOUS SUBSTATIONS, DELHI (INDIA)	3.00 Crore	6.00 Lakh	Delhi Various Sites

The bidder must qualify the requirements as specified in clause 2.0 stated below.

All envelopes shall be duly super scribed “**DESIGN, ENGINEERING, SUPPLY, ERECTION, TESTING, & COMMISSIONING OF NEW BATTERY ENERGY STORAGE SYSTEM ALONG WITH ALLIED EQUIPMENTS AND WORKS ON TURNKEY BASIS**” “**NIT NO: CMC/BY/20-21/RB/SV/29 DUE ON 11.01.2021, 15:00 Hr.**”

Bid shall be submitted in two (02) parts. Details of part are as follow:

Part A – Techno Commercial Bid

Part B – Price Bid

- 1.1. The schedule of specifications with detail terms & conditions can be obtained from address given below against submission of non-refundable demand draft of ₹ 1,180/- drawn in favour of BSES Yamuna Power Ltd, payable at Delhi or Online transfer of requisite amount through NEFT/ RTGS. The tender documents & detail terms and conditions can also be downloaded from the website www.bsesdelhi.com --> **BSES YAMUNA POWER LTD** --> **Tender** --> **Open Tenders**
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.

- 1.2. Bids will be received up to **11.01.2021, 15:00 Hr.** at the address given below.
Part A of the Bid shall be opened on **12.01.2021, 15:00 Hr.**

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
Ground Floor
Shaktikiran Building, Karkardooma
Delhi 110032

- 1.3 BSES Yamuna Power Ltd reserves the right to accept/reject any or all tenders without assigning any reason thereof in the event of following:

INFORMATION TO BIDDER (ITB) NIT NO: CMC/BY/20-21/RB/SV/29	Page 2 of 15	Bidders seal & signature
--	--------------	--------------------------

- a) Tender fee of requisite value.
- b) Earnest Money Deposit (EMD) of requisite value & validity is not deposited in shape of Bank Guarantee drawn in favor of BSES Yamuna Power Ltd, payable at Delhi or Online transfer of requisite amount through NEFT/RTGS
- c) The offer does not contain prices indicating break-up towards all taxes & duties in prescribed format.
- d) Complete Technical details are not enclosed as per the Technical Bid Submission Checklist
- e) Tender is received after due date and time.
- f) Technical offer contains any prices.
- g) Prices are not FIRM and subject to Price Variation.

2.00 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.

2.01 Technical Criteria:

SI No.	Criteria	Documents to be submitted by bidder
1	The bidder should be at least one of the following: a. Manufacturer of Li-ion batteries b. Manufacturer of Power Conversion System (PCS) c. System Integrator	i. Details of manufacturing units and factory incorporation certificate or ii. System Integrator
2	The bidder should have infrastructure in India for providing service & spare support to BYPL. The relevant documents including details of manufacturing units, locations and works from where supply & spares against this tender shall be proposed to be furnished.	i. Details of manufacturing units ii. details of service units
3	Bidder should have the experience of supply, installation, testing, commissioning & AMC of Battery Energy storage system of cumulative installed capacity 1 MWh	i. Turnkey Purchase order/Work order copy ii. Work completion certificate copy iii. Consolidated list of executed BESS purchase orders along with date of work completion
4	Bidder should have valid type test report of offered model of Power Conversion System (PCS) and Battery. Test should be conducted from CPRI/ERDA/ NABL accredited lab or an equivalent international Lab as per IEC/IS/UL standard.	i. Type test report of PCS ii. Type test report of Battery
5	Installed capacity of 200 kWh must have been in successful operation for at least One year prior to due date for tender submission	Performance certificates

5	Bidder shall procure equipment's from the approved vendor list of BYPL for individual items. The bidder is supposed to have agreement with manufacturer/service provider to provide support to BYPL for any service & spares related issues for time stipulated in the specification or service life of the equipments. The bidder must submit the undertaking for the same.	Undertaking for Back up support by OEM's
6	The bidder should possess valid Electrical Contractor License issued by competent statutory agency to undertake work in NCT Delhi. In case bidder is not having this license, suitable sub-contractor having the valid license shall be engaged for works at site where copy of valid license shall be submitted to BYPL before the start of the work OR Bidder to give the undertaking that it will be obtained by them before the start of the work at site.	<ul style="list-style-type: none"> i. Electrical Contractor License Copy ii. Undertaking if not available

2.02 Commercial Criteria:

SI No.	Criteria	Documents to be submitted by bidder
1	The bidder must have adequate Financial Stability and status to meet the financial obligation pursuant to the scope of work and shall have average annual turnover of minimum Rs 10 Crore during last three (3) Financial Years preceding the date of opening of bid.	Duly certified CA certificate to be submitted
2	An undertaking (self-certificate) that the bidder has not been blacklisted/debarred by any central/state government institution including electricity boards and also confirm that there is no pending litigation with government on account of executing similar order	Undertaking
3	The bidder should have registered under GST ACT and shall submit copy of GST Registration Number, PAN, PF, ESI in addition to other statutory compliances. The bidder must submit the copy of registrations and submit an undertaking that the bidder shall comply all the statutory compliances as per the applicable laws/rules etc	Relevant Statutory Documents Copy

The subsidiaries of global/Indian companies are also eligible to bid if the qualification requirements stated above are met independently or in combination with parent/sister concern/group Company. However, the bidder should have an establishment of permanent nature in India. Notwithstanding anything stated above, BYPL reserves the right to assess bidder's capability to perform the contract, assess the capability and installed capacity of the Bidder for carrying out the supplies, should the circumstances warrant such assessment in the overall interest of the purchaser. In this regard the decision of the purchaser is final.

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 will be distributed to all participating bidders through website.

3.01 BID SUBMISSION

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

**Head of Department
Contracts & Material Deptt.
BSES Yamuna Power Ltd
3rd Floor, A Block
Shaktikiran Building, Karkardooma
Delhi 110032**

PART A :: TECHNICAL **BID** comprising of following:

Sr. No	Descriptions	Type of Documents
Commercial :		
1	Tender Fee - Demand Draft (Rs.1180/-) (Incl GST)	Non-refundable demand draft for Rs 1180/- in case the forms are downloaded from website
2	EMD	In prescribed stamp paper & format
3	Power-of-Attorney	In prescribed stamp paper & format
4	PQR Compliances	Documentary evidence in support of qualifying criteria like: 1. Details of constitution of the company (Proprietary/Limited/etc along with the details), Memorandum of Association of the company 2. Bidders shall submit the certified annual Balance sheets for the last completed three (3) financial years 3. Supportive document on Positive Net worth. Credit rating/solvency certificate from competent authority. 4. Copies of Orders, Execution /Performance Certificate & Other Documents to support qualification Criteria
5	Signed Tender document	Original Tender documents duly stamped & signed on each page as token of acceptance
6	Black listing undertaking	Bidder should submit a Self-undertaking signed by its Authorized Signatories that the Bidder or any of their sub-contractor has not been blacklisted/barred by any Govt. Organization or Regulatory Agencies in India or abroad.
7	Commercial Terms and Conditions	Acceptance on Commercial Terms and Conditions viz Delivery schedule/period, Payment terms, PBG etc.
8	Acceptance on Reverse Auction	Duly signed Acceptance Form For Participation In Reverse Auction Event as per attached format
9	Bid Form (Unpriced) Duly Signed	Duly Signed Bid Form as per attached format
10	Un price Bid Duly Signed	Duly Signed Un price Bid as per attached format

Sr. No	Descriptions	Type of Documents
Technical:		
11	Technical Details/ Filled in GTP/Drawings	Bidder shall submit duly filled GTP with all Technical documents and Drawings.
12	Type Test Reports	Bidders shall submit the copy of type test reports in their technical bids in support of technical specifications
13	Testing Facilities	Bidder shall submit the details of testing facilities available at their works/factory.
14	Organization Chart & Manpower Details.	Bidder shall submit the details of Organization & Manpower with qualification and experience.

- PART B** :: **FINANCIAL BID** comprising of (01 original only)
- Price strictly in the Format enclosed indicating Break up of basic price, taxes & duties, transportation etc

3.02 TIME SCHEDULE

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

S.No.	Steps	Due date
1	Last Date of Sale of Bid Documents	08.01.2020
2	Date of Site Visit (If require)	08.01.2020, 10:00HRS
3	Pre-Bid Meeting	08.01.2020, 15:00HRS
4	Last Date of Queries, if any	08.01.2020, 15:00HRS
5	Last Date of Receipt of Bid Documents	11.01.2020, 15:00HRS
6	Date & Time of Opening of PART A - Technical and Commercial Bid	12.01.2020, 16:00HRS

This is a two part bid process. Bidders are to submit the bids in 2(Two) parts
Both these parts should be furnished in separate sealed covers super scribing NIT no. DUE DATE OF SUBMISSION, with particulars as **PART-A TECHNICAL BID & COMMERCIAL TERMS & CONDITIONS** and **Part-B FINANCIAL BID** and these sealed envelopes should again be placed in another sealed cover which shall be submitted before the due date & time specified.

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

PART B: This envelope will be opened internally after techno-commercial evaluation and only of the qualified bidders.

Bidder has to submit the item wise price bifurcation in bid. Un priced copy must be attached with the Part A (Technical Bid). Reverse Auction will be carried out on Lump sum Basis/Total Landed Cost i.e. Supply + Services

REVERSE AUCTION CLAUSE :: Purchaser reserves the right to use reverse auction as optional tool through SAP – SRM as an integral part of the entire tendering process. All techno-commercially qualified bidders 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. Bidder to submit their acceptance as per format attached ANNEXURE-C

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

4.00 AWARD DECISION

- 4.01 Purchaser intends to award the business on a lowest bid basis, so suppliers are encouraged to submit the bid competitively. The decision to place purchase order/LOI solely depends on purchaser on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Purchaser may deem relevant.
- 4.02 In the event of your bid being selected by purchaser (and / or its affiliates) and you 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.
- 4.03 In case any supplier is found unsatisfactory during the delivery process, the award may be cancelled and BYPL reserves the right to award other suppliers who are found fit.
- 4.05 Quantity Variation: The purchaser reserves the rights to vary the quantities as per the actual requirements.
- 4.07 Quantity Splitting: The purchaser reserves the right to distribute the procurable quantity on one or more than one of the eligible tenders. If the quantity is to be split, quantity distribution shall be in the manner detailed below:
a) If the quantity is to be split among 2 bidders, it will be done in the ratio of 70:30 on L1 price.
b) If the quantity is to be split among 3 bidders, it will be done in the ratio of 50:30:20 on L1 price.
Note: In case quantity needs to be distributed and order splitting is required, distribution of quantity shall be maximum among three (3) bidders

5.00 MARKET INTEGRITY

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

- 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.

7.00 CONTACT INFORMATION

Technical clarification, if any, as regards this RFQ shall be sought in writing and sent by e-mail/post/courier to following addresses. The same shall not be communicated through phone

Address	Name/ Designation	E-mail Address
Technical		
CES Dept. 3 rd Floor, B-Block, BSES Yamuna Power Ltd Shaktikiran Building, Karkardooma, Delhi 110032	Gaurav Sharma AVP (HOD-CES)	gaurav.a.sharma@relianceada.com
	Puneet Duggal DGM (C&M)	puneet.duggal@relianceada.com
	Abhishek Vashistha Sr Manager (CES)	abhishek.vashistha@relianceada.com
Commercial		
C&M Dept. 3 rd Floor, A-Block, BSES Yamuna Power Ltd Shaktikiran Building, Karkardooma, Delhi 110032	Rakesh Bansal VP (HOD-C&M)	rakesh.bansal@relianceada.com
	Rajesh Srivastava Addl. VP (Head-Procurement)	rajesh.r.srivastava@relianceada.com
	Sumit Verma DGM (C&M)	sumit.ra.verma@relianceada.com

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 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 any way from the selection process for the Supply.
- 3.03 Though adequate care has been taken while issuing the Bid document, the Bidder should satisfy itself that Documents are complete in all respects. Intimation of any discrepancy shall be given to this office immediately.
- 3.04 This Document and the information contained herein are Strictly Confidential and are for the use of only the person(s) to whom it is issued. It may not be copied or distributed by the recipient to third parties (other than in confidence to the recipient's professional advisors).

4 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)
 - (b) Instructions to Bidders
 - (c) General Terms & Conditions of Contract (T&C)
 - (d) Delivery schedule
 - (e) Price Formats & Summary T&C
 - (f) Bid Form
 - (g) Acceptance Format – RA
 - (h) EMD BG Format
 - (i) Vendor code of conduct
 - (j) Appendix
 - (k) Technical Specifications (TS)
- 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.bsedelhi.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.bsedelhi.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 visit website regularly for any modification/clarification/corrigendum/addendum of the bid documents.**

C. PREPARATION OF BIDS

7.0 LANGUAGE OF BID

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

8.0 DOCUMENTS COMPRISING THE BID

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

- (a) Bid Form, Price & other Schedules (STRICTLY AS PER FORMAT) and Technical Data Sheets completed in accordance with Technical Specification.
- (b) All the Bids must be accompanied with the required EMD as mentioned in the Section-I 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 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-I. 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 drawn in favour of BSES Yamuna Power Ltd, payable at Delhi.
- (b) EMD shall be valid for One Hundred Twenty (120) days after due date of submission drawn in favour of BSES Yamuna Power Ltd

The EMD may be forfeited in case of:

(a) the Bidder withdraws its bid during the period of specified bid validity

or

(b) the case of a successful Bidder, if the Bidder does not

(i) Accept the Purchase Order, or

(ii) Furnish the required performance security BG.

10.0 **BID PRICES**

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

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

Prices quoted by the Bidder shall be "**Firm**" and not subject to any price adjustment during the performance of the Contract. **A Bid submitted with an adjustable price/ Price Variation Clause will be treated as non-responsive and rejected.**

11.0 **BID CURRENCIES**

11.01 Prices shall be quoted in Indian Rupees Only.

12.0 **PERIOD OF VALIDITY OF BIDS**

12.01 Bids shall remain valid for 120 days from the due date of submission of the Bid.

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

13.0 **ALTERNATIVE BIDS**

13.01 Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of Bidders is drawn to the provisions 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 5.0), 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. The Bid submitted on behalf of companies registered with the Indian Companies Act, for the time being in force, shall be signed by persons duly authorized to submit the Bid on behalf of the Company and shall be accompanied by certified true copies of the resolutions, extracts of Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the Bid on behalf of the Company. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid. A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

The Bidder's name stated on the Proposal shall be the exact legal name of the firm.

- 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 & time of submission.
- 16.02 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with Clause 6.0, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended

17.0 ONE BID PER BIDDER

- 17.01 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

18.01 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 and returned unopened to the Bidder.

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.

INFORMATION TO BIDDER (ITB) NIT NO: CMC/BY/20-21/RB/SV/29	Page 13 of 15	Bidders seal & signature
--	-----------------------------	--------------------------

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

Submission of bids shall not automatically construe qualification for evaluation. 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 within 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 receipt whichever is earlier plus 3 months claim period. Upon submission of the performance security BG, 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.

APPENDIX I

(FORMAT FOR EMD BANK GUARANTEE)

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

Whereas [*name of the Bidder*] (herein after called the "Bidder") has submitted its bid dated [*date of submission of bid*] for the supply of [*name and/or description of the goods*] (here after called the "Bid").

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

Sealed with the Common Seal of the said Bank this_____ day of_____ 20_____.

The conditions of this obligation are:

- 1 If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:
 - (a) fails or refuses to execute the Contract Form, if required; or
 - (b) fails or refuses to furnish the performance security, In accordance with the Instructions to Bidders/ Terms and Conditions;

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

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

(Stamp & signature of the bank)

Signature of the witness



BID FORM

To

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

Sir,

1 We understand that BYPL is desirous of procuring..... for it's licensed distribution network area in Delhi

2 Having examined the Bidding Documents for the above named works, we the undersigned, offer to deliver the goods in full conformity with the Terms and Conditions and technical specifications for the sum indicated in Price Bid or such other sums as may be determined in accordance with the terms and conditions of the contract. The amounts are in accordance with the Price Schedules attached herewith and are made part of this bid.

3 If our Bid is accepted, we under take to deliver the entire goods as) as per delivery schedule mentioned in Section IV from the date of award of purchase order/letter of intent.

4 If our Bid is accepted, we will furnish a performance bank guarantee for an amount of 10% (Ten)percent of the total contract value for due performance of the Contract in accordance with the Terms and Conditions.

5 We agree to abide by this Bid for a period of 120 days from the due date of bid submission and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

6 We declare that we have studied the provision of Indian Laws for supply of equipments/materials and the prices have been quoted accordingly.

7 Unless and until Letter of Intent is issued, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

8 We understand that you are not bound to accept the lowest, or any bid you may receive.

9 There is provision for Resolution of Disputes under this Contract, in accordance with the Laws and Jurisdiction of Contract.

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

Signature..... In the capacity of

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

(IN BLOCK CAPITALS)

APPENDIX I NIT NO: CMC/BY/20-21/RB/SV/29	Page 2 of 9	Bidders seal & signature
---	---------------------------	--------------------------

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder)

BSES Yamuna Power Ltd (hereinafter referred to as "**BYPL**") intends to use the reverse auction 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 bidder.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of BYPL, bid process, bid technology, bid documentation, bid details, and etc.
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 reverse auction 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 Landed Cost basis at BYPL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
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-rata basis against each line item based on the final all-inclusive prices offered during conclusion of the auction event for arriving at contract amount.

Signature & seal of the Bidder

ANNEXURE - 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.	Page No.	NIT Clause descriptions	Details of Clarification/deviation with justifications

Technical Bid Submission Check List

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

VENDOR CODE OF CONDUCT

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

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

I. Labour and Human Rights

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

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

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

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

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

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

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

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

. Freedom of Association - Open communication and direct engagement between workers and management are the most effective ways to resolve workplace and compensation issues. Vendors are to respect the rights of workers to associate freely and to communicate openly with management regarding working conditions without fear of reprisal, intimidation or harassment. Workers’ rights to join labour unions seek representation and or join worker’s councils in accordance with local laws should be acknowledged.

II. Health and Safety

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

The health and safety standards are:

- . Occupational Injury and Illness - Procedures and systems are to be in place to prevent, manage, track and report occupational injury and illness, including provisions to: a) encourage worker reporting; b) classify and record injury and illness cases; c) provide necessary medical treatment; d) investigate cases and implement corrective actions to eliminate their causes; and e) facilitate return of workers to work.
- . Emergency Preparedness - Emergency situations and events are to be identified and assessed, and their impact minimized by implementing emergency plans and response procedures, including: emergency reporting, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities and recovery plans.
- . Occupational Safety - Worker exposure to potential safety hazards (e.g., electrical and other energy sources, fire, vehicles, and fall hazards) are to be controlled through proper design engineering and administrative controls, preventative maintenance and safe work procedures (including lockout/tagout), and ongoing safety training. Where hazards cannot be adequately controlled by these means, workers are to be provided with appropriate, well-maintained, personal protective equipment. Workers shall not be disciplined for raising safety concerns.
- . Machine Safeguarding - Production and other machinery is to be evaluated for safety hazards. Physical guards, interlocks and barriers are to be provided and properly maintained where machinery presents an injury hazard to workers.
- . Industrial Hygiene - Worker exposure to chemical, biological and physical agents is to be identified, evaluated, and controlled. Engineering or administrative controls must be used to control overexposures. When hazards cannot be adequately controlled by such means, worker health is to be protected by appropriate personal protective equipment programs.
- . Sanitation, Food, and Housing - Workers are to be provided with ready access to clean toilet, facilities potable water and sanitary food preparation, storage, and eating facilities. Worker dormitories provided by the Participant or a labour agent are to be maintained clean and safe, and provided by the Participant or a labour 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.

APPENDIX I NIT NO: CMC/BY/20-21/RB/SV/29	Page 7 of 9	Bidders seal & signature
---	-------------	--------------------------

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 be 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:

APPENDIX I NIT NO: CMC/BY/20-21/RB/SV/29	Page 8 of 9	Bidders seal & signature
---	---------------------------	--------------------------

- . 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

**GENERAL CONDITIONS OF CONTRACT
(GCC-SUPPLY)**

GENERAL CONDITIONS OF CONTRACT (GCC)-SUPPLY

The General Condition of Contract shall form a part of specifications, contract document.

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 INSPECTION & TEST CHARGES:

- 6.01 GOODS shall be inspected by BUYER and/or third party inspection agency nominated by BUYER. Inspection shall carry out stage wise/final inspection as per agreed QA /QC procedure. In addition, inspection of GOODS shall be carried out at our Site/stores. SELLER shall, however, repair/replace the damaged/rejected GOODS to the satisfaction of BUYER at no extra cost.
- 6.02 Inspection charges are included in total order value, however BUYER will bear third party inspection charges. In case of futile/abortive visit of BUYER's inspector at SELLER'S works, the cost towards the same shall be debited from the SELLER's invoices.
- 6.03 GOODS covered by this PURCHASE ORDER shall not be dispatched in whole or in part until SELLER has received a written Release for Shipment Notice from BUYER or their designated representative.
- 6.04 Inspection call shall be raised minimum 15(fifteen) days in advance from delivery schedule mentioned in PO and duly filled Format issued by BYPL

7.0 HANDLING AND STORAGE:

- 7.01 Material Safety Data Sheet (MSDS), detail handling & storage instruction sheet/manual, wherever applicable, to be furnished before commencement of supply and one copy is to be submitted in store/site with First Lot.

8.0 Packing, Packing List & Marking

- 8.01 **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.
- 8.02 **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.

9.0 Prices/Rates/Taxes

9.01 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 GST, Freight, 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 Bidder; however bidder to furnish required details in advance for arranging the same by Purchaser

10.0 TAXES & DUTIES:

- 10.01 Prices for Goods are on Ex- Works basis. For the Goods covered under the GST laws, all taxes that are applicable under CGST, SGST, UGST, IGST and GST Compensation Cess shall be payable extra.
- 10.02 For the Goods not covered in the GST laws, the applicable ED, VAT / CST shall be payable extra at applicable rates.
- 10.03 GSTIN of BSES YAMUNA POWER LTD - 07AABCC8569N1Z0
CST No of BSES YAMUNA POWER LTD -07740254593
TIN NO of BSES YAMUNA POWER LTD - 07740254593
PAN NO of BSES YAMUNA POWER LTD - AABCC8569N
- 10.04 At the end of each month, the SELLER must submit their detail of invoices and amount thereof to the concerned officer in charge, within 07 days after the close of the respective month of which supply relates. Non submission of the said request would be treated as good as that the SELLER has no requirement of reconciliation.

11.0 INVOICING INSTRUCTIONS:

- 11.01 Invoices in triplicate [1) Original for recipient, 2) Duplicate for Transporter, 3) Triplicate for supplier] shall be made out and delivered to the following address: BSES YAMUNA POWER LIMITED, SHAKTI KIRAN BUILDING, KARKARDOOMA, DELHI-110032.
MDCC will be released separately for Capex & Opex. Invoice will be submitted by supplier as per the MDCC.
- 11.02 Vendor shall obtain GST registration in the State from where the supply will be carried out. Vendors supplying Goods to the Purchaser shall have a valid GST registration number and shall submit GST Tax Invoice and other documents as per SGST Act, CGST Act, IGST Act, UTGST Act, GST Compensation Cess Act and Rules made there under. Failure to submit GST Tax Invoice shall be liable for withholding SGST, CGST, IGST, UTGST, GST Compensation Cess amount charged by the vendor while releasing the payment.
- 11.03 Invoice in the name of BSES YAMUNA Power Limited & address of the store/site mentioned in the MDCC. Invoice should contain all information as required under GST Invoice, Debit Note and Credit Rules. The government has notified rules of invoicing under GST along with a template of invoice(GST INV-01) covering the elements such as supplier's details, GSTIN No, HSN Codes, item details, GST tax rates, etc that need to be presented by the supplier.

- 11.04 Vendor to carefully examine and charge relevant CGST / SGST, UGST, IGST and GST compensation as applicable to the transactions.
- 11.05 Timely provision of invoices / Debit Notes / Credit Notes:
- 11.05.1 Vendor to timely provide invoice / Debit note / Credit note to enable Purchaser to claim tax benefit on or before stipulated time period. All necessary adjustment entries (Credit Note, Purchase Returns, Debit Notes) shall be made within the time lines prescribed under the GST Laws.
- 11.05.2 In case of receipt of advance, the Vendor undertakes to raise the tax invoice. Purchaser, upon payment of advance, shall issue payment voucher as per applicable GST laws and rules. Four copies of the invoices need to be provided by suppliers and wherever the law requires, an Electronic Reference Number for each invoice.
Documents and devices to be carried by a person-in-charge of a conveyance under.

12.0 Terms of payment and billing

- 12.01 For Supply of Equipments (Package wise):

Part 1) 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 STORES/SITE on presentation of following documents:

- a) Signed copy of accepted Purchase Order (for first payment)
- b) LR / RR / BL as applicable
- c) Challan as applicable
- d) Two (02) copies of Supplier's detailed Recipient Invoice showing Commodity description, quantity, unit price, total price and basis of delivery, and being 100% of the value of the consignment claimed.
- e) Two (02) copies of Supplier's transporter invoice duly received by BYPL Stores & Original certificate issued by BYPL confirming receipt of the subject material at Stores/Site and acceptance of the same as per the provisions of the contract.
- f) Two (02) copies Packing List / Detailed Packing List
- g) Approved Test certificates / Quality certificates, if applicable
- h) Certificate of Origin, if applicable
- i) Material Dispatch Clearance Certificate (MDCC)
- j) Insurance Policy / Certificate, if applicable
- k) Warranty / Guarantee Certificate, if applicable
- l) Check list for bill submission.

Part 2) Balance 10% of basic value shall be paid in 30 days from the date of successful testing, commissioning and handing over of individual Package Substation 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 against the GRN.

- 12.02 Purchaser has the right to recover tax loss, interest and penalty suffered due to any non-compliance of tax laws by the Vendor. In the event, Purchaser is not able to avail any tax credit due to any short coming on the part of the Vendor (which otherwise should have been available to Purchaser in the normal course), then the Vendor at his own cost and effort will get the short coming rectified. If for any reason the same is not possible, then the Vendor will make 'good' the loss suffered by Purchaser due to the tax credit it lost . In such event, any amount paid to the Vendors shall be first attributable to the tax (GST) charged in the invoice and the balance shall be considered towards the 'value' of supply of goods/ services.

- 12.03 Purchaser shall deduct "Tax Deducted at Source" wherever applicable and at the rate prescribed under the GST Laws or any other Indian law and remit the same to the Government. Necessary TDS certificates as per law shall be issued by the purchase to the vendor.
- 12.04 Any liability arising out of dispute on the tax rate, classification under HSN, calculation and payment of tax to the Government will be to the Vendor's account.
- 12.05 Where the supply of Goods are liable to GST under reverse charge mechanism, then the supplier should clearly mention the category under which it has been registered and also that "the liability of payment of GST is on the Recipient of Supply".

13.0 TAX INDEMNITY CLAUSE:

- 13.01 Vendor (along with its affiliates in India or overseas including any agent/ third party contractor or any other person appointed by such affiliates for the purpose of this agreement) agrees that it will be solely responsible for performing all compliances and making payments of all taxes (direct tax or indirect tax including but not limited to income-tax, transfer pricing, value added tax, SGST, CGST, IGST, UTGST, GST Compensation Cess custom duty, excise duty, Research and Development Cess, etc.), cesses, interest, penalties or any other tax/ duty/ amount/ charge/ liability arising either out of laws/ regulations applicable in India and overseas or because of a demand/ recovery initiated by any revenue authority under laws/ regulations applicable in India or overseas.
- 13.02 In case any tax liability (including but not limited to income-tax, transfer pricing, value added tax, SGST, CGST, IGST, UTGST, GST Compensation Cess custom duty, excise duty, Research and Development Cess, etc.), cesses, interest, penalties or any other tax/ duty/ amount/ charge/ liability becomes payable by Purchaser due to failure of the Vendor, or any of its affiliates in India or overseas including any agent/ third party contractor or any other person appointed by such affiliates for the purpose of this agreement, to comply with the relevant laws/ regulations applicable in India or overseas, Vendor undertakes to indemnify Purchaser for an amount equal to amount payable by Purchaser.
- 13.03 Further, Vendor undertakes to keep Purchaser indemnified at all times against and from all other actions, proceedings, claims, loss, damage, costs and expenses which may be brought against Purchaser or suffered or incurred by Purchaser and which shall have arisen either directly or indirectly out of or in connection with failure of The Vendor, or any of its affiliates in India or overseas including any agent/ third party contractor or any other person appointed by such affiliates for the purpose of this agreement, to comply with relevant obligations/ compliance under any law/ regulations applicable in India and overseas.
- 13.04 The parties agree to follow the following process in case any communication of demand, arising out non-compliance by Vendor (along with its affiliates in India or overseas including any agent/ third party contractor or any other person appointed by such affiliates for the purpose of this agreement), is received by Purchaser :
- 13.04.1 On Purchaser receiving any communication from a competent authority demanding tax liability (including but not limited to income-tax, transfer pricing, value added tax, SGST, CGST, IGST, UTGST, GST Compensation Cess custom duty, excise duty, Research and Development Cess, etc.), cesses, interest, penalties or any other tax/ duty/ amount/ charge/ liability, Purchaser shall, within 5 common working days from the date of receipt of such communication (save where the period to respond to the relevant authority is less than five days, in which case, as soon as reasonably possible) inform Vendor in writing of such communication.
- 13.04.2 Pursuant to receiving communication from Purchaser, Vendor shall suggest to accept the communication and pay the demand amount to the competent authority. In such an event, Vendor shall reimburse such amount paid to Purchaser within 5 working days from the date of payment by Purchaser to the competent authority.

- 13.04.3 If Vendor advises in writing and Purchaser agrees to dispute the demand, then Purchaser shall dispute the matter with competent authority as per due process prescribed under the regulations and Purchaser shall not pay the Tax Demand. In such scenario, cost of litigation including but not limited to Counsel cost, filing fees, other related charges, should be reimbursed by Vendor to Purchaser. Additionally, If any coercive steps of recovery are initiated by the department, then Purchaser would pay such amount (including by way of adjustment of refunds due to it) and the same would be reimbursed by Vendor within 5 working days from date of such recovery from Purchaser. Purchaser will take all necessary steps to avoid such recovery measures.
- 13.04.4 On determination of the demand through an Order issued by a Tribunal or any other similar Authority, by whatever name called, under any law applicable in India or overseas, if the demand or any part thereof becomes payable and is paid by Purchaser, then Vendor undertakes to reimburse such amount to Purchaser within 10 days from the date of payment. Alternatively, if on determination of the demand through an Order, no amount is payable by Purchaser then any refund arising to Purchaser due to such an Order shall be passed on to Vendor within 10 days from the date of receipt of refund.

14.0 The Micro, Small and Medium Enterprises (MSME):

- 14.01 If the SELLERS establishment is covered under the purview of The Micro, Small and Medium Enterprises Development Act, 2006, he shall declare so within the bid of its status failing which it will be presumed that it is a non-MSME unit. Also submit a copy of Udyog Aadhaar (UA) if available.

15.0 Price Validity

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

16.0 Performance Guarantee

- 16.01 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.
- 16.02 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.

17.0 Forfeiture

- 17.01 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.
- 17.02 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.

18.0 Release

GENERAL CONDITIONS OF CONTRACT (GCC-SUPPLY) NIT NO: CMC/BY/20-21/RB/SV/29	Page 8 of 17	Bidders seal & signature
---	----------------------------	--------------------------

18.01 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.

19.0 Defects Liability Period/Guarantee/Warranty

19.01 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.

19.02 If during the Defects Liability Period any GOODS are found to be defective, they shall be promptly replaced or rectified by BIDDER at its own cost (including the cost of dismantling and (reinstallation) on the instructions of BUYER and if removed from SITE for such purpose, shall be removed and re-delivered to SITE by BIDDER at its own cost.

20.0 Return, Replacement or Substitution.

20.01 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. BUYER at its sole discretion shall have the opinion to dispose the material or GOODS so rejected and not taken back within forty-five days from the date of intimation of rejection.

21.0 Effective Date of Commencement of Contract:

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

22.0 Time – The Essence Of Contract

22.01 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.

23.0 The Laws and Jurisdiction of Contract:

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

23.02 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

24.0 Events of Default

24.01 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.

25.0 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.

26.0 Penalty for Delay

26.01 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 of undelivered units or part thereof for individual mile stone deliveries.

26.02 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 of total undelivered units.

26.03 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.

22.4 If Penalty is levied as per the Order terms & conditions; BYPL will raise Invoice of the penalty amount along with applicable GST rates. Accordingly, after set off of the penalty Invoice amount, net payment shall be made.

GENERAL CONDITIONS OF CONTRACT (GCC-SUPPLY) NIT NO: CMC/BY/20-21/RB/SV/29	Page 10 of 17	Bidders seal & signature
---	-----------------------------	--------------------------

27.0 VARIATION IN TAXES, DUTIES & LEVIES

- 27.1 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. In case of reduction in taxes, duties and levies, the benefits of the same shall be passed on to BUYER.
- 27.2 No other Taxes, Duties & Levies other than those specified above will be payable by BUYER except in case of new Levies, Taxes & Duties imposed by the Competent Authorities by way of fresh notification(s) subsequent to the issue of PURCHASE ORDER but within the stipulated delivery period.
- 27.3 Notwithstanding what is stated above, changes in Taxes, Duties & Levies shall applied only to that portion of PURCHASE ORDER not executed on the date of notification by Competent Authority. Further, changes in Taxes, Duties & Levies after due date of Delivery shall not affect PURCHASE ORDER Terms and Value.
- 27.4 PURCHASE ORDER value shall not be subject to any variation on account of variation in Exchange rate(s).

28.0 TAXES & DUTIES ON RAW MATERIALS & BOUGHT OUT COMPONENTS:

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

29.0 Force Majeure

29.01 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.

- 29.02 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 :

<p>GENERAL CONDITIONS OF CONTRACT (GCC-SUPPLY) NIT NO: CMC/BY/20-21/RB/SV/29</p>	<p>Page 11 of 17</p>	<p>Bidders seal & signature</p>
--	------------------------------------	-------------------------------------

- 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.
- 29.03 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.
- 29.04 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.
- 29.05 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.
- 29.06 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.
- 29.07 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.
- 29.08 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.
- 29.09 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."

30.0 Transfer And Sub-Letting

30.01 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.

31.0 Recoveries

31.01 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.

32.0 Waiver

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

33.0 Indemnification

33.01 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.

34.0 Problem Troubleshooting & Restoration In Warranty Period For A Particular Equipment:

- 34.01 a) Service Engineer Availability to Attend, Identify & Restore Defects (Minor) Of Equipments under Guarantee Period within 48 Working Hours (Exclusion of Material Support Cases)
- b) Spare Material Delivery For Restoration Of Grid Equipment (Major Defect) Under Guarantee Period Within Two Weeks. Seller must keep Requisite Inventory of Critical Switchgear Spares & Other Equipment's Covered in Guarantee Period to Restore Equipment within Two Weeks.
- c) In Case Of Complete Replacement of Equipment, Complete Equipment to Be Replaced Within a Period Of 4 Weeks.

35.00 DOCUMENTATION

35.01 The Bidder shall procure all equipment from BYPL approved sources as per attached specifications. The Bidder's shall submit 5 copies of Material/Type Test Certificates, O&M Manuals, and Approved & As-built drawings, related to various equipment. The Bidder's shall ensure for the strict compliance to the specifications and Field Quality Procedures issued by BYPL Engineer in-charge.

36.0 Limitation of Liability

36.01 Except as provided otherwise in the Contract and except for willful misconduct or gross negligence, neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or any other indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract. The total liability of the Contractor to

GENERAL CONDITIONS OF CONTRACT (GCC-SUPPLY) NIT NO: CMC/BY/20-21/RB/SV/29	Page 13 of 17	Bidders seal & signature
---	-----------------------------	--------------------------

the Purchaser under the Contract shall not exceed the Contract Value. Except that this Clause shall not limit the liability of the Contractor:

- (a) Under any other provisions of the Contract which expressly impose a greater liability,
- (b) In cases of fraud, willful misconduct or illegal or unlawful acts, or
- (c) In cases of acts or omissions of the Contractor which are contrary to the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances.

37.0 Liability of Contractors

37.01 Subject to the due discharge of its obligations under the Contract and except in case of gross negligence or willful misconduct on the part of the Contractor or on the part of any person acting on behalf of the Contractor, with respect to any loss or damage caused by the Contractor to the Purchaser's property or the Site, the Contractor shall not be liable to the Purchaser for the following:

- (a) For any indirect or consequential loss or damage; and
- (b) For any direct loss or damage that exceeds:
 - (i) The total payments made and expected to be made to the Contractor under the Contract including reimbursements, if any; or
 - (ii) The insurance claim proceeds which the Contractor may be entitled to receive from any insurance purchased by the Contractor to cover such a liability, whichever is higher.

37.02 This limitation of liability shall not affect the Contractor's liability, if any, for damage to any third party, caused by the Contractor or any Person or firm acting on behalf of the Contractor in executing the Works.

37.03 Notwithstanding anything contained in the Contract, the Contractor shall not be liable for any gross negligence or willful misconduct on the part of the Purchaser or any of its affiliates, any vendor, or any party, other than Contractor and/or, its directors, officers, agents or representatives or its affiliates, or Subcontractor, or the vendor or any third party engaged by it.

37.04 Notwithstanding anything contained in the Contract, including but not limited to approval by the Purchaser of any drawings, documents, vendor list, supply of information or data or the participation of the Purchaser in any meeting and/or discussion or otherwise, shall not absolve the Contractor from any of its liabilities or responsibilities arising in relation to or under the Contract.

38.0 Intellectual Property Rights and Royalties

38.01 The Contractor shall indemnify the Purchaser and the Purchaser's Representative from and against all claims and proceedings on account of infringement (or alleged infringement) of any patent rights, registered designs, copyright, design, trademark, trade name, know-how or other intellectual property rights (hereinafter collectively referred to as "Intellectual Property Rights") in respect of the Works, Contractor's Equipment, machines, Works method, Plant, Materials, or anything whatsoever required for the execution of the Works and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. In the event of infringement of any Intellectual Property Rights of any third party as a result of the execution of the Works (or any part thereof) by the Contractor, the Contractor shall rectify, modify or replace, at its own cost, the Works, Plant or Materials or anything whatsoever required for the Works so that infringement ceases to exist or, in the alternative, the Contractor shall procure necessary rights/licenses from the affected third party so that there is no infringement of Intellectual Property Rights.

38.02 The Contractor shall be promptly notified of any claim made against the Purchaser. The Contractor shall, at its cost, conduct negotiations for the settlement of such claim, and any litigation or arbitration that may arise from it. The Purchaser or the Purchaser's Representative shall not make any admission which might be prejudicial to the Contractor, unless the Contractor has failed to take over the conduct

GENERAL CONDITIONS OF CONTRACT (GCC-SUPPLY) NIT NO: CMC/BY/20-21/RB/SV/29	Page 14 of 17	Bidders seal & signature
---	-----------------------------	--------------------------

of the negotiations, litigation or arbitration within a reasonable time after having been so requested. In the event of Contractor failing to act at the Purchaser's Representative's notice, the Purchaser shall be at full liberty to deduct any such amount of pending claim from any amount due to the Contractor under the Contract or any other contract and the balance portion of claim shall be treated as debt due from the Contractor.

- 38.03 All Intellectual Property Rights in respect of any Plant, Materials, Drawings and Designs, plans, documents, specifications, data, materials, know how, charts, information, etc., provided to the Contractor by the Purchaser pursuant to this Contract for the execution of the Works, belongs to and shall continue to belong to the Purchaser and the Contractor shall not have any rights in the same other than the limited right for its use for the purpose of execution of the Works.
- 38.04 Intellectual Property Rights in respect of any Plant, Materials, Drawings and Designs, plans, calculations, drawings, documents, know-how and information relating to the Works which are proprietary to the Contractor and/ or its third party licensors ("Contractor's IPR") shall continue to vest with the Contractor and/ or its third party licensors and the Contractor shall grant and/ or procure from its third party licensors, at its own cost, a worldwide, perpetual, royalty free, non-exclusive license (along with the right to sub-license) to use and reproduce such Contractor's IPR for the use, operation, maintenance and repair of the Works.
- 38.05 If any patent, trademark, trade name, registered design or software is developed by the Contractor or its Subcontractor specifically for the execution of the Works, then all Intellectual Property Rights in respect of such design, trademark, trade name or software shall be the absolute property of the Purchaser and shall not be utilized or retained by the Contractor (or its Subcontractors) for any purpose other than with the prior written consent of the Purchaser.
- 38.06 If the Contractor uses proprietary software (whether customized or off the shelf) for the purpose of storing or utilizing records in relation to the Works, the Contractor shall obtain at its own expense, the grant of a worldwide, royalty-free, perpetual licence or sublicense (including the right to sublicense) to use such software, in favour of the Purchaser provided that the use of such software under the licence or the sublicense may be restricted to use any such software only for the design, construction, reconstruction, manufacture, installation, completion, reinstatement, extension, repair and operation of the Works or any part thereof.
- 38.07 If any software is used by the Contractor for the execution of the Works over which the Contractor or a third party holds pre-existing title or other rights, the Contractor shall obtain for the Purchaser, a worldwide, royalty free, perpetual license for the right to use and apply that software (together with any modifications, improvements and developments thereof).

39.00 Commissioning Spares

- 39.01 Commissioning Spares shall be deemed to be included in the quoted prices.

40.0 Transit Insurance:

- 40.01 Transit Insurance shall be arranged by the Bidder.
- 40.02 **DAMAGE / LOSS OF CARGO IN TRANSIT:** Vendor shall be solely responsible for coordinating with the concerned insurance company for procuring insurance for material and/or Goods, processing claim lodgment and settlement. Notwithstanding the insurance cover, in case of loss / damage to material and/or Goods, in any manner and for any cause whatsoever, Vendor shall cause the damaged cargo to be replaced and delivered to the Purchaser with new material and/or Goods within 30 days of such loss / damage. The Vendor shall be solely responsible for all expenses in relation to the replacement and delivery in such circumstances.

41.0 Acceptance:

- 41.01 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) also, which shall be treated as a part of the contract/PO/WO. Vendor undertakes that he shall adhere to the Vendor code of Conduct and also agrees that any violation of the Vendor Code of Conduct shall be treated as breach of the contract/PO/WO. In event of any such breach, irrespective of whether it causes any loss/damage, Purchaser (BYPL) shall have the right to recover loss/damage from Vendor. The Contractor/Vendor hereby indemnifies and agrees to keep indemnified the Purchaser (BYPL) against any claim/litigation arising out of any violation of Vendor Code of Conduct by the Contractor/Vendor or its officers, agents & representatives etc.
- 41.02 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.
- 41.03 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
- 41.04 We expect your services and supplies are aligned to our Vision, Mission and Values. Please refer to the following link to know about our Vision, Mission and Values; <https://www.bsesdelhi.com/web/bypl/about-bses>

QUANTITY AND DELIVERY REQUIREMENTS

Sl. No.	BYPL SAP Code	Item Description	Specification	Total Qty.	Tentative Delivery Schedule	Destination
1	-	SITC OF OF NEW 5X200 kWh CAPACITY BATTERY ENERGY STORAGE SYSTEM (BESS) ALONG WITH ALLIED EQUIPMENTS AND WORKS	SP- DBESS - 138-R1	05 Nos	Completion within 16 weeks from the date of PO	BYPL Sites Delhi

NOTE:

- The delivery shall be as per the requirement and as per the written instructions issued by C&M deptt., BYPL.
- BYPL reserves the right to split the quantity to any extent.
- Schemes may be executed in the phased manner.

**GENERAL CONDITIONS OF CONTRACT
(GCC-ETC)**

GENERAL TERMS & CONDITIONS - INSTALLATION, 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 "Erection Testing and commissioning of BESS Package at site(s), Delhi.

SCOPE OF WORK

Assembly, Installation, Testing & Commissioning of Includes:

- 1) Construction of concrete foundation/plinth or prefabricated foundation/plinth
- 2) Installation of Package at the designated site.

- 3) Assembling of standard fittings and all accessories (glands, lugs etc).
- 4) Complete testing and commissioning and submission of testing reports/results including Integration of BESS system with BYPL network including integration with BYPL SCADA
- 5) Earthing
- 6) Cabling
- 7) All the labour, cranes tools, and tackles, testing instruments/kit and technical supervision etc. are included in the vendor scope of work.
- 8) The cost of transit insurance, freight, loading/unloading of materials/equipments during its handling/erection at site is included in the vendor scope of work.
- 9) Obtaining ESO (BSES Electrical Safety Officer) shall be in the scope of bidder, all the necessary documents like drawings, test reports and any other relevant documents shall be provided by the supplier.
- 10) Against this contract individual framework order / intimation of site will be issued and work shall be completed within 30 days from the date of issue or order / intimation.
- 11) Transportation of BESS Package from Store to site (i.e., loading, Transportation & Unloading), if required.

A Separate order will be placed for supply & ETC 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.

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.

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.

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.

Rate for all the extra items shall be mutually negotiated and fixed on the basis of cost of materials, consumables, labour and T&P expenses plus overhead expenses and profit upto maximum 10%.

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 all taxes and duties including labour cess and GST as applicable. However, IT as per applicable rate will be deducted from your bills as Tax Deduction at Source (TDS).

<p>GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29</p>	<p>Page 3 of 12</p>	<p>Bidders seal & signature</p>
---	-----------------------------------	-------------------------------------



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. BILL SUBMISSION PROCEDURE:

All bills shall be submitted to the Engineer In charge / Package Engineer for certification. Bills shall be complete in all respect including ESI / HR compliance, Quality compliance, HSE compliance, Store compliance, Finance compliance etc. An established procedure is followed at site. Incomplete bills / invoices will not be considered for processing payments.

8. TERMS OF PAYMENT:

Payment shall be made as under (Package 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.

Company shall make payments of the bills either; By crossed cheque or by electronic transfer directly to Contractor's designated bank account.

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.

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.

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.

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 4 of 12	Bidders seal & signature
--	----------------------------	--------------------------

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 basic order value for each week or part there of delay until the actual date of completion up to a maximum deduction of 5% of basic 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 and shall be entirely responsible for the complete safety of their workman as well as other workers at site and premises. The contractor shall not deploy any worker below the age of 18 years.

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 casualties, 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 various Acts, Rules, including but not limited to The Child Labour (Prohibition & Regulation) Act, 1986, The Contract Labour (Regulation & Abolition) Act, 1970. The Employees Pension scheme , The Employees Provident Funds and miscellaneous provisions Act, 1952 ,The Employees state Insurance Act,1948,The Equal Remuneration Act, The Industrial Dispute Act,1947, The Maternity Benefit Act , 1961, The Minimum Wages Act, 1948, The payment of Bonus Act ,1965, The Payment of Gratuity Act,1972, The Payment of wages Act, 1936, The Shops & Establishment Act, The Workmen's Compensation Act , 1923, Building and Other Construction Workers (Employment and Regulations) Act 1996, Building and Other Construction Workers (Cess) Act 1996, The Employers Liability Act,1938, Indian Electricity Act, 2003 and Indian Electricity Rules, VAT and Service tax etc., 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.
- 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.

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 5 of 12	Bidders seal & signature
--	----------------------------	--------------------------

- 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 Act 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 mandatory for the Contractor to furnish the Company the permanent PF code no and ESI of the employees.

16. WORKMAN COMPENSATION:

The Contractor 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

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 6 of 12	Bidders seal & signature
--	----------------------------	--------------------------



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. INSURANCE:

18 a) THIRD PARTY INSURANCE:

Before commencing the execution of the work the contractor shall take third party insurance policy at his own cost 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 contractor 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 contractors own cost.

18 b) ACCIDENTAL INSURANCE POLICY FOR LIFE COVER:

Before commencing the execution of the work the CONTRACTOR shall take Accidental 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

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 7 of 12	Bidders seal & signature
--	----------------------------	--------------------------



permanent Disability due to external accidents). The Contractor shall be responsible for on the spot same day claim settlement with the victim's legal heirs without waiting for settlement by insurance claim without any liability on BYPL. The premium amount for such life cover policy shall be borne by the contractor. The contractor shall furnish copy of policy when demanded by BYPL.

18 C) INSURANCE FOR MAN, MATERIAL & MACHINERY DEPLOYED AT SITE:

Contractor shall be responsible for the insurance for his own man, material and machinery deployed at site for the package awarded. Contractor shall furnish the copy of this insurance policy to the purchaser, prior start of work.

19. 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 elaborated separately. 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.

20. TEST CERTIFICATE & QUALITY 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.

21. PROTECTION OF PROPERTY:

The Contractor shall be responsible for any damage resulting from his operation. He shall also be responsible for protection of all persons including members of public; and employees of the PURCHASER & the PURCHASER; employees of the Contractors & Subcontractors; and all public and private property including structures, buildings, other plants and equipment and utilities either above or below the ground.

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 8 of 12	Bidders seal & signature
--	----------------------------	--------------------------



The Contractor shall ensure provision of necessary safety equipment such as barriers, sign boards, warning lights and alarms, etc to provide adequate protection to persons and property. The Contractor shall be responsible to give reasonable notice to the PURCHASER & the PURCHASER of public or private property and utilities when such property and utilities are likely to get damaged or injured during the performance of his works and shall make all necessary arrangements with such PURCHASER, related to removal and/or replacement or protection of such property and utilities.

22. 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.

23. 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.

24. 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.

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 9 of 12	Bidders seal & signature
--	----------------------------	--------------------------

25. 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.

26. FORCE MAJEURE:

27.1 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

27.2 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.

27.3 Notice of Events of Force Majeure:

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 10 of 12	Bidders seal & signature
--	-----------------------------	--------------------------



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.

27.4 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.

27.5 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.

27.6 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.

27. SECRECY CLAUSE:

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.

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 11 of 12	Bidders seal & signature
--	-----------------------------	--------------------------



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.

28. 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.

29. 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.

30. ACCEPTANCE:

Acceptance of this work order implies and includes acceptance of all terms and conditions enumerated in this work order in the technical specification and drawings made available to you consisting of general conditions, detailed scope of work, detailed technical specification & detailed equipment, drawing. Complete scope of work and the Bidder's and Company's contractual obligation are strictly limited to the terms set out in the work order. No amendments to the concluded work order shall be binding unless agreed to in writing for such amendment by both the parties.

However, during the course of the execution of the work order, if at any time the Company's representative observe and form an opinion that the work under the work order is not being performed in accordance with the terms of this work order, the company reserves its right to cancel this work order forthwith without assigning any reason and the Company will recover all damages including losses occurred due to loss of time from the Bidder.

We request you to please sign the duplicate copy of this work order as a token of your acceptance and return to us.

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 12 of 12	Bidders seal & signature
--	-----------------------------	--------------------------

CONTRACT HEALTH AND SAFETY PLAN

1 OBJECTIVE

The objective of the Contractor Health and Safety plan is to lay down clear guidelines for all Vendors / contractors and manpower agencies (including their associates, staff and agents) which would facilitate them to observe all statutory and regulatory rules and regulations, comply with applicable standards of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010 & (safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations, 2011, BYPL EHS policy, Safety Manual Guidelines, and SOPs and thus, ensure creation of safe working environment for all stakeholders of our network.

2 SCOPE

It is applicable to all contracts, work orders of any kind and cost will be subjected to the provisions of this document.

Small Contracts: Contracts which satisfy all the criteria listed under the head "Small Contracts".

Major Contracts: Contracts which satisfy any two or more criteria listed under the head "Major Contracts"

Criteria	Small Contracts	Major Contracts
Value of Contract	< Rs. 20,000,00/- (less than Rs. Twenty Lac)	>= Rs. 20,000,00/- (Equal or more than Rs. Twenty Lac)
Period	Period less than 1 year	Any period
Working on energized electrical equipment	No	Yes
Working on height (above 1.8 Mtrs from ground)	No	Yes
Work involving construction activity	No	Yes
Working with hazardous goods or chemicals	No	Yes
Work involving danger to general public	No	Yes

Exclusions: Exceptions for major and small contract are – in house software development, supply of material or equipment but no direct or indirect installation of the same material, administration contracts (courier, water supply, printing, security, transport, etc.). The facility management (housekeeping) contract will always be treated as a small contract.

3 GENERAL SAFETY CONDITIONS

For small contracts, the contractor shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver all duties and responsibilities of Safety Supervisor as detailed in this document.

For Major contracts, the contractor will appoint Safety supervisor, engineer / manager for the works in BYPL. The Contractor shall make all necessary arrangements for getting their workforce safety trained and competency checked from the safety team of BYPL before deployment in the field.

Safety Representative of Contractor will formally become the nodal point for safety concerns for BYPL. Contractor shall not frequently transfer or terminate the services of any of the safety representatives appointed for BYPL work site. Contractor will be required to provide all applicable infrastructure and power to ensure smooth working of the safety representative to maintain a sound safety management system. In the major contracts safety representative will not be assigned any other activity at site apart from the works related to safety management.

The Safety Representative of the Contractor shall be required to meet and follow the instructions of the Engineer In-charge and EHS team of BYPL. He shall be responsible for providing the MIS and/or any other relevant information, as and when desired, within the stipulated time frame as per the requirements of BYPL. Any non-conformance to safety will lead to the negative marking or issue of safety violation challan/tokens which shall affect the monthly evaluation and performance of Contractor.

All contracts where Contractor has to depute vehicle for their staff and equipment to move from one location to other, the Contractor shall ensure that vehicle complies all required statutory clearances and requirement as per The Motor Vehicle Act, 1988 and are in good & safe state of working.

The Contractor shall display the name of the Safety representative at all its sites including zonal and divisional office.

4 QUALIFICATION AND EXPERIENCE OF THE SAFETY PERSONAL

Qualification and experience required for the safety and site personnel are as following:

Safety Supervisor: It is mandatory that educational qualification of safety supervisor be ITI (electrician trade) / Diploma (Any branch of engineering) and he has a working experience on electrical system / network of at least 5 yrs for ITI and 3 years for Diploma holder. Having formal experience of the safety systems will be an added advantage

Safety Engineer: It is mandatory that educational qualification of safety engineer be at least diploma (electrical) and he has working experience on electrical system of at least 3 yrs. Having the formal experience of the safety systems will be an added advantage.

Safety Manager: The educational qualification of safety manager should be graduate engineer with working experience on electrical system / network of at least 3 yrs. OR Diploma in Industrial Safety with working experience of 05 years including at least 02 years on electrical network.

Site Skilled Personnel: For all responsibility related to site activities and operations, the BA shall employ only qualified and skilled persons and shall comply the provisions of section 19 & 29 of Central Electricity

Authority (Measures relating to safety and electric supply) Regulations, 2010. Persons holding valid approvals only by any Government approved agency or a competency assessment panel or a team set up by TPDDL shall be allowed to perform the High Risk / High Hazard activities (refer page 1). The skill / qualification required for the electrician and electrical supervisor are given in annexure 5. The contracts related to maintenance of Distribution Network, Distribution Projects, EHV Projects, maintenance of Sub-Transmission Network, MMG & EAG, maintenance and operation of street lights, shall preferably have at least 20 per cent of ITI qualified electricians in the first year of the contract. This figure shall preferably be incremented by 15 per cent every subsequent year.

5 Requirements from the Safety Representative(s)

Safety training of 4hrs/employee/month and one day of safety induction training to all new employees.

- Safety Talk / tool box talk before start of shift to all his workmen
- Ensuring the availability & proper usage of the safety equipment (PPE)
- Periodic inspection of PPE to ensure their serviceability
- Ensuring the adherence to standard operating procedures of BYPL
- Safety inspections / audits as per the process of BYPL
- Working in close coordination EHS department of BYPL
- Reporting of unsafe acts, unsafe conditions, near miss, incident or accident to Engineer In-Charge and EHS department of BYPL immediately after its occurrence.

Ensuring compliance with safety and other laws as may be applicable and providing for safety assurance.

6 Safety Induction Training

The Contractor shall not deploy any person at work place / site without Safety Induction Training. It is desired that Safety representative of the Contractor to impart the general safety training to each employee of duration 4 hrs per month. The training will be organized at Contractor level and the record to be sent to engineer in-charge and EHS department of BYPL every month.

7 List of Personal Protective Equipment (PPE) and Maintenance schedule

Contractor shall commence the project or any work only when the required PPE are made available to the team of employees involved in the work. Each PPE of Contractor shall be checked / inspected by the safety representative / supervisor at zone before the work start or as prescribed in the list. Safety representative shall regularly check the healthiness of each PPE allocated to lineman. Suitable record shall be maintained at zone. Defective PPE shall be immediately replaced or within 24 hours by the Contractor. In no case linemen or any other official of Contractor may be allowed to work with defective PPE. It is preferred that Contractor ensures minimum stock of each PPE for immediate replacement with defective one.

The PPE shall be IS / BS / CE marked and exactly as per the standard or specification mentioned in the *annexure 1*. Working without PPE / non-standard PPE shall be treated as safety violation and penalty as stated in section 12 of this document. If BYPL finds that Contractor has not provided the adequate / appropriate PPE to their staff, BYPL may provide the PPE to Contractor at the risk and actual cost of the PPE. Amount as decided by the management shall be charged to Contractor and same shall be first recovered from the current bill of Contractor or any future payment to be made to Contractor. In the event

<p>GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29</p>	<p>Page 15 of 12</p>	<p>Bidders seal & signature</p>
---	------------------------------------	-------------------------------------



of any balance amount still left for recovery, the same shall be adjusted against retention amount or by invoking bank guarantee submitted by Contractor.

8 Integrated Management System & Audits

The Contractor shall work in the framework of Integrated Management System (IMS) and shall maintain documentation as prescribed in the IMS Manual of BYPL.

All contractors during their currency of contract shall strive to continuously improve and demonstrate strict compliance to ISO 9001, ISO 14001 & OHSAS 18001 standards of BYPL.

To verify compliance and to continually improve the management system, all contractors shall be subjected to both internal & external audits.

8.1 HIRA

The safety representative will be required to conduct the HIRA (Hazard Identification and Risk Assessment) of the process and work undertaken at least once in a year or every time if a new process / activity / machine is introduced or whenever an accident take place. The risk identified to be addressed suitably with

–
Engineering Control
Administrative Control, and
Personal Protective Equipment.

The safety representative of Contractor shall inform and educate for the identified risk and hazard control methods to employees, supervisor and engineer as well as the engineer in-charge and EHS department of BYPL.

8.2 Working at Height

The Contractor shall ensure that all works carried out at a height of 2 Meter or more shall only be started after obtaining a permit to work at height, which shall be issued as per the procedure of BYPL by authorized personnel.

The contractor shall ensure that all control measures mentioned and agreed through above work permit or as deemed necessary by BYPL are enforced and complied all the time during activities carried out at height.

9 Safety Performance and Safety MIS

The Contractor shall maintain good practice of safety all through the contract duration. Safety shall always be of paramount importance during the contract period. Safety performance will be monitored throughout the period and no relaxation will be given for bad performance. Contractor with good track record and excellent performance will be rewarded suitably. The Contractor has to provide monthly "Performance Report – Safety" to engineer in-charge and EHS department of BYPL this shall be part of monthly bill along with training details. Performa of the report is enclosed as *annexure 2 to 5*.

10 Pre – Employment Medical Check-up and Fitness of employees engaged for the critical works

The contractor shall arrange a medical examination of all his employees including his sub-contractor employees like lineman, ALM, supervisor, Fitter, welders, gas cutters, drivers, workers supposed to work at height (and any other trade specified deemed necessary by BYPL at the time of deployment then annually) before employing, after illness or injury, if it appears that the illness or injury might have affected his fitness and, thereafter, once in every year as per the provisions of applicable laws or as prescribed by BYPL with proper record.

The Contractor shall submit the health fitness certificate for all those workers involved in climbing the pole or working at height for following diseases:

- Epilepsy
- Colour blindness
- Deafness
- Vertigo & height phobia

Every year Contractor will give an undertaking stating that all the employees are fit to work and have not developed aforesaid diseases.

Records of medical examination as described above shall be maintained at the contractor premises and shall be promptly produced as and when demanded by BYPL.

No person about whom the Contractor knows or has reason to believe that he is a deaf or he has a defective vision or he has a tendency to giddiness shall be required or allowed to work in any O&M operation or other construction work which is likely to involve a risk of any accident either to the worker himself or to any other person.

11 Suspension of Work

BYPL shall have the right at its sole discretion to suspend the work till compliance of safety norms, if in its opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and / or property, and / or equipments.

In such cases, the contractor shall be informed in writing about the nature of hazards and possible injury /accident and he shall comply to remove all shortcomings promptly. Decision of BYPL shall be conclusive and binding on the Contractor in such aspects.

The contractor shall not be entitled to damages / compensation for suspending of work due to safety reasons and the period of such stoppage of work will not be taken as an extension of time for completion of the facilities as per the work order and will not be the ground for wavier of levy of liquidated damages. The contractor shall follow and comply with all safety Rules of BYPL, relevant provisions of applicable laws pertaining to the safety of workmen, employees plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservation. In case of any inconformity between statutory requirement and safety rules of the BYPL referred above, the latter shall be binding on the contractor unless the statutory provisions are more stringent.

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 17 of 12	Bidders seal & signature
--	-----------------------------	--------------------------

12 Penalty matrix for safety violations

Consequence Of Safety Violation Observed (Not related to incident / accident)		Violation				Subsequent violations	Action required
SI No	Safety Violations	1st	2nd	3rd	4th		
1	Working without PPE	A	A	B	B	Will attract same penalty as applicable in 4th violation	Take risk reduction measure
2	Working without proper tools and tackles	A	B	B	C		
3	Working without creation of proper safety zone	B	B	C	D		
4	Improper supervision at worksite	B	C	D	E		
5	Working without PTW process	C	D	E			
							Intolerable
Legand	Action to be taken	Responsibility		Penalty Amount in Rs		The number violations are to be calculated cummulative on the contract period or on the annual basis (which ever is less).	
A	Warning Letter	Engineer incharge		NIL			
B	Levy of penalty	Engineer incharge		INR 2,000			
C	Memo to Contactor and levy of penalty	Circle Head		INR 4,000			
D	Momo to contractor and leavy of penalty	Head of Department		INR 10,000			
E	Memo to Contactor, levy of penalty and termination of contract	Head of Department		INR 100,000			

Fig 12(1) – Penalty Matrix for safety violation

The above figure (12 (1)) is the matrix of safety violation and the penal action to be taken against the contractor. Once the contractor reaches the "BLACK" (color – "5") category, i.e. highest level of safety violation, "Termination" notice to contractor will be issued from the office of the Head of Department (equivalent to AVP/ VP) and further, *if required*, continuation / extension of contract will only be initiated by Functional Head of the department (equivalent to VP/Sr VP level) and approved by CEO. Till the extension, the contract will remain suspended.

Safety violations resulting in incident / accident will be treated as per gravity of the injury / fatality and its impact as well as type i.e. minor or Major. Consequences of incident / accident are shown in the matrix (figure 12(2) for major and 12(3) for small) below. In case of any accident, findings and recommendations of Accident Enquiry Committee will be final and binding and will supersede the arbitration clause of GCC.

Consequence of an Incident/Accident (in case of MAJOR contract)		Incident/Accident				Action required
SI No	Safety Violations	1st	2nd	3rd	4th	
1	Slight injury (First Aid Case)	F (STRENGTHENING OF PROCESS)				Take risk reduction measure
2	Minor injury (No or Hospitalization less than 48 Hrs)	F	G	G	H	
3	Major injury (Bone injury or burn or Hospitalization more than 48 hrs)	G	G	H	I	
4	Single Fatality	J	K			
5	Multiple fatalities (Two or more fatalities during one event)	K				
Legend	Action to be taken	Responsibility		Penalty Amount in Rs		The number violations are to be calculated cumulative on the contract period or on the annual basis (which ever is less).
F	Issue memo and levy of penalty	Engineer incharge		INR 5,000		
G	Issue memo and levy of penalty	Engineer incharge		INR 20,000		
H	Issue memo and levy of penalty	Circle Head		INR 50,000		
I	Issue memo and levy of penalty	Head of Department		INR 200,000		
J	Issue memo and levy of penalty	Head of Department		INR 500,000		
K	Issue memo, levy of penalty, termination of contract and black listing of contractor	Function Head		INR 1,000,000		

Fig 12(2) – Penalty Matrix for Incident/Accident in Major Contracts

Consequence of an Incident/Accident (in case of SMALL contract)		Incident/Accident				Action required
SI No	Safety Violations	1st	2nd	3rd	4th	
1	Slight injury (First Aid Case)	L (STRENGTHENING OF PROCESS)				Take risk reduction measure
2	Minor injury (No or Hospitalization less than 48 Hrs)	L	M	M	N	
3	Major injury (Bone injury or burn or Hospitalization more than 48 hrs)	M	M	N	O	
4	Single Fatality	P	Q			
5	Multiple fatalities (Two or more fatalities during one event)	Q				
Legend	Action to be taken	Responsibility		Penalty Amount in Rs		The number violations are to be calculated cumulative on the contract period or on the annual basis
L	Issue memo and levy of penalty	Engineer incharge		INR 5,000		
M	Issue memo and levy of penalty	Engineer incharge		INR 10,000		

N	Issue memo and levy of penalty	Circle Head	INR 25,000	(whichever is less).
O	Issue memo and levy of penalty	Head of Department	INR 100,000	
P	Issue memo and levy of penalty	Head of Department	INR 200,000	
Q	Issue memo, levy of penalty, termination of contract and black listing of contractor	Function Head	INR 5,00,000	

Fig 12(3) – Penalty Matrix for Incident/Accident in small Contracts

In case of single or multiple fatalities described under legends J&K of fig 12(2) and P&Q of fig 12(3), the concerned contractor may be debarred from extension of contract or participate in new contract. In such event the approval of functional Head will be necessary for extension or award of new contract to concerned contractor.

ANNEXURE-I

Specification for Personal Protective Equipment

Safety Shoes – With Composite/Fiber toes (CE approved / IS 15298) – Mandatory for all personnel working at BYPL O&M. The safety shoes shall meet the following features:

1. Electric Shock Resistant Sole
2. Impact Resistant
3. Scrap/Heat Resistant
4. Slip Resistant
5. Oil and Acid Resistant

Lead MAKE: BATA/LIBERTY/Honeywell

Safety Helmets: (IS 2925 - 1984 or DGMS) with chin strap – Mandatory for all personnel working at BYPL O&M. The specification of safety helmet shall be as given below:

HDPE Yellow With 4 Point Fast Trac Ratchet Suspension

Shell Material	UV stabilise HDPE, Non vented
Suspension	<ul style="list-style-type: none"> • With 4 Point Fas Trac Ratchet Suspension sewn headband • Textile straps made from polyester Suspension • point fixing: good positioning, ...stability, better air circulation due to ...limited contact areas with the head • Easy clean sweatband
Size	52-62 cm
Accessory slot	Standard 30 mm with removable HDPE dead plugs suitable to leak proof fitting
Approvals	ANSI/ IEC Z89.1 Class E (electrical)
Additional	Low temperature -10°C (acc. to GB2811), High temperature +50°C
Colours	Yellow
weight	360 g

Lead MAKE: 3M / KARAM/Honeywell

Full Body positioning Harness: (CE approved / IS 3521 / EN 361 / EN 355) – Shall be used while work is in progress at height more than 1.8 meter or where from a person may fall and get injured. The specification of the Full body harness shall be as given below:

Anchorage	Adjustable two chest attachment D-rings and A dorsal attachment D-ring
Adaptability	Adjustable shoulder and thigh straps
Convenience	Shoulder and thigh straps differentiated by a dual colour scheme.
Ergonomics	Ideally. Positioned sit strap for extended comfort.
Size	Standard
weight	1200GMS
ENERGY ABSORBING FORKED LANYARDS :	
Spec.	44mm wide polyamide webbing.
Length	1.5 Meter

Lead MAKE: KARAM /LIFEGEAR

Safety Spectacles

Shall be used to protect workers eyes from foreign materials and flying particles. Mandatory for all personnel working at BYPL O&M. Safety goggles shall meet the following feature

1. Poly carbonate/ Acetate lens for special applications requiring superior chemical resistance.
2. Industrial version of tough and popular first responder goggles.
3. SoftFlex low profile frosted frame for increased comfort.
4. Comfortable headband with length adjustment.
5. Indirect venting for comfortable, long lasting wear can be worn with safety helmets and over prescription spactacles.
6. Sightgard + premium anti-fog coating (EN 166 "N") with good anti- scratch properties.

Technical Specification:

Weight	95g.
Lens thickness	1.0mm
Overall width	173mm
Overall length	90mm
Bridge	47.6mm
Lens base	5.5 curve
Lens size	86.1mm verticle, 174mm diagonal
Headband	Adjustable length at max.440mm(long enough to fit together with helmets)
Material & colours	
Lens	Acetate clear, coating, Sightgard + anti-fog according to EN 166 "N" & anti scratch.
Body	PVC smoke
Headband holder	Nylone

Headband	Adjustable grey elastic fixed on frame side parts
Marking / Approvals	
Standard number	EN 166
Frame marking	MSA EN 166 34-FT CE
Lens marking	2C-1.2 MSA 1 FT N CE
Filter class	2C (Ultra violet radiation with enhanced colour recognition)
Scale number	1.2: luminous transmittance-89%
Optical class	1 (best class, for permanent wear)
Mechanical resistance	F (low energy impact 45m/s) T (at extreme temperature -5 to +55° C)
Resistance to	N(distorted vision due to lens fogging)
UV filter	99.9%
Ordering information	10145578-FlexiChem Sightgard + clear , 6x

Lead MAKE: MSA / UVEX/ 3M

Electrical Insulating Hand Gloves – Shall be used to prevent electric shock based upon the hazards/risks involved in a particular activity. Safety goggles shall meet the following feature

Breakthrough manufacturing process delivers exception dry grip.
 Soft and flexible for enhanced tactility, high dexterity and wearer comfort.
 Ergonomic design featuring tapered fingers to reduce hand fatigue.
 Relaxed wrist for easy on/off.

Length	360mm
Class	2
Thickness	3.6mm
Proof test voltage	20000
Maximum use voltage	11000
Tensile strength	>16mpa[Mega Pascal]
Puncture resistance	>18N/mm [Newton per mili meter]
Elongation at break	>600% [Stretching length]
Tension set	<15%

It should be resist to oil, acid, ultra violet rays and very low temperature.
 Each pair of glove should be marked with class, category, month & year of manufacturing, CE logo, batch no. and certified laboratory no.
 EN certified to electrical and thermal hazards,
 EN certified to thermal & electrical hazards to confirm EN 60-903,
 EN certified to mechanical hazard to EN-388

Lead MAKE: Honeywell / ANSELL

CERTIFICATES REQUIRED:

1. Manufacturer Certificate
2. Test Certificate
3. Authorization of Dealership/Distributionship

Reflective Safety Jacket – Class -2 Safety Vest mandatory for all personnel working at BYPL O&M. Shall be used by the worker during the work.

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 23 of 12	Bidders seal & signature
--	-----------------------------	--------------------------



Warning Tapes – HDPE or LDPE Made of 50 micron thick, non adhesive, width 75mm –Safety Logo embossed at every foot with white and red strips on both sides in Tubular form – Shall be used for barricading area around excavated pit to warn the personnel not to enter in such areas.

Road barricading cone with barricading tape – Shall be used by the worker during the operation / maintenance work.

Arc Protection Suit - shall be used by the worker for all HT/ EHV related works.

Annexure #2

**BSES YAMUNA POWER LIMITED
(Name of Site)**

Safety Appreciation / Violation Memo

DIVISION/Area: -----

Date & Time: -----

Name of Contractor: -----

Activity: -----

Name of Division Head: -----

Appreciation/Penalty Memo#:

S.N	Safety Violation Details	Class (A/B/C/D/E)	No. of Violations	Penalty per Violation (Rs)	Penalty Amount (Rs)	Remarks
1						
2						
3						
4						
5						

Safety Appreciation/Violation Note:

Recommended By: Name: ----- Designation: -----

Sign/Date: -----

Approved By (Division Head): Name: ----- Designation: -----

Sign/Date: -----

Annexure #3

**BSES YAMUNA POWER LIMITED
(Name of Site)**

Monthly Status of PPE's / Tool Kit

Location/Area: -----

Date & Time: -----

Name of Contractor: -----

No. AMC Employee:

Lineman:

ALM:

Status of PPE's

S.N	Name of PPEs / Tool	No. Of PPEs	Condition	Remarks
1	Safety Helmet			
2	Safety Goggle			
3	Electrical Insulating Hand gloves			
4	Full Body Harness			
5	Safety Shoes			
6	Reflective Jacket			

Signature / Date

Annexure #4

**BSES YAMUNA POWER LIMITED
(Name of Site)**

Monthly Status - Accident / Incident

Location/Area: -----

Date & Time: -----

Name of Contractor: -----

Table – 1: Summary of Accident /Incident / Near Miss / Dangerous Occurences / First Aid:

S.N	Type of Accident /Incident / Near Miss / Dangerous Occurences / First Aid	Person Injured	Brief Discription
1			
2			
3			
4			
5			

Table – 2: Learning from Incidents:

S.N	Brief Discription	Root Cause	Recommendation
1			
2			
3			
4			
5			

Table – 3: Summary of Person Injured:

GENERAL CONDITIONS OF CONTRACT (GCC-ETC) NIT NO: CMC/BY/20-21/RB/SV/29	Page 27 of 12	Bidders seal & signature
--	-----------------------------	--------------------------

S.N	Name of Employee	Emp. ID / Designation	Type of Injury	Duration of Medical Rest	
				From	To
1					
2					
3					
4					
5					

Table -4 : Safety Inspections / Violation

S. No.	Date	Location	Discrepancies	Compliance
1				
2				
3				
4				
5				

Table - 5 : Health & Safety Complaints & Sugesstions :

S. No.	Date	Location	Complaints / Sugestion
1			
2			
3			
4			
5			

Measures to avoid recourences for all above mentioned discrepancies (Attach relevant documents if required)

Signature / Date



Annexure #5

**BSES YAMUNA POWER LIMITED
(Name of Site)**

Format - PPE's Receipt by workers

Division:

Name of Contractor:

S. NO	NAME	DESI.	Safety Helmet	Electrical Insulating Hand gloves	Full Body Harness	Safety Shoes	Safety Goggle	Reflective Jacket	SIGNATURE

Signature of Contractor / Date.....

APPENDIX II

**FORMAT OF PERFORMANCE BANK GUARANTEE
(To be executed on a Non-Judicial Stamp Paper of appropriate value)**

This Guarantee made at _____ this [____] day of [____] 20XX

1. WHEREAS M/s BSES Yamuna Power Limited, a Company incorporated under the provisions of Companies Act, 1956 having its Registered Office at Shaktikiran Building, Karkardooma, Delhi 110032, India hereinafter referred to as the " Owner ", (which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns).
2. AND WHEREAS the Owner has entered into a **contract for _____** (Please specify the nature of contract here) vide **Contract No. _____** dated _____ (hereinafter referred to as the "Contract") with **M/s. _____**, (hereinafter referred to as "the Supplier", which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include each of their respective successors and assigns) for providing services on the terms and conditions as more particularly detailed therein.
3. AND WHEREAS as per clause **____ of conditions of Contract**, the Suppliers are obliged to provide to the Owners an unconditional bank guarantee for an amount equivalent to ten percent (10%) of the total Contract Value for the timely completion and faithful and successful execution of the Contract from [_____] **pl. specify the name of Bank**) having its head/registered office at [_____] through its branch in _____ **(pl. specify the name of Branch through which B.G is issued)** hereinafter referred to as "the Bank", (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns).
4. NOW THEREFORE, in consideration inter alia of the Owner granting the Suppliers the Contract, the Bank hereby unconditionally and irrevocably guarantees and undertakes, on a written demand, to immediately pay to the Owner any amount so demanded (by way of one or more claims) not exceeding in the aggregate [Rs.]..... **(in words)** without any demur, reservation, contest or protest and/or without reference to the Supplier and without the Owner needing to provide or show to the Bank ,grounds or reasons or give any justification for such demand for the sum/s demanded.

5. The decision of the Owner to invoke this Guarantee and as to whether the Supplier has not performed its obligations under the Contract shall be binding on the Bank. The Bank acknowledges that any such demand by the Owner of the amounts payable by the Bank to the Owner shall be final, binding and conclusive evidence in respect of the amounts payable by the Supplier to the Owner. Any such demand made by the Owner on the Bank shall be conclusive and binding, notwithstanding any difference between the Owner and the Supplier or any dispute raised, invoked, threatened or pending before any court, tribunal, arbitrator or any other authority.
6. The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor without proceeding against the Suppliers notwithstanding any other security or other guarantee that the Owner may have in relation to the Supplier's liabilities.
7. The Bank hereby waives the necessity for the Owner first demanding the aforesaid amounts or any part thereof from the Suppliers before making payment to the Owner and further also waives any right the Bank may have of first requiring the Owner to use its legal remedies against the Suppliers, before presenting any written demand to the Bank for payment under this Guarantee.
8. The Bank's obligations under this Guarantee shall not be reduced by reason of any partial performance of the Contract. The Bank's obligations shall not be reduced by any failure by the Owner to timely pay or perform any of its obligations under the Contract.
9. The Bank further unconditionally and unequivocally agrees with the Owner that the Owner shall be at liberty, without the Bank's consent and without affecting in any manner its rights and the Bank's obligation under this Guarantee, from time to time, to:
 - (i) vary and/or modify any of the terms and conditions of the Contract;
 - (ii) Forebear or enforce any of the rights exercisable by the Owner against the Suppliers under the terms and conditions of the Contract; or
 - (iii) Extend and/or postpone the time for performance of the obligations of the Suppliers under the Contract;

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

10. This Guarantee shall be a continuing bank guarantee and shall not be discharged by any change in the constitution or composition of the Suppliers, and this Guarantee shall not be affected or discharged by the liquidation, winding-up, bankruptcy, reorganisation, dissolution or insolvency of the Suppliers or any of them or any other circumstances whatsoever.
11. This Guarantee shall be in addition to and not in substitution or in derogation of any other security held by the Owner to secure the performance of the obligations of the Suppliers under the Contract.
12. NOTWITHSTANDING anything herein above contained, the liability of the BANK under this Guarantee shall be restricted to _____ *(insert an amount equal to ten percent (10%) of the Contract Value)* and this Guarantee shall be valid and enforceable and expire on _____ *(pl. specify date)* or unless a suit or action to enforce a claim under this Guarantee is filed against the Bank on or before the date of expiry.
13. On termination of this Guarantee, all rights under the said Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities hereunder.
14. The Bank undertakes not to revoke this Guarantee during its validity except with the prior written consent of the Owner and agrees that any change in the constitution of the Bank or the Suppliers shall not discharge our liability hereunder.
15. Owner may assign this Guarantee to any Person or body whether natural, incorporated or otherwise under intimation to the Bank. The Bank shall be discharged of its obligations hereunder by performance in accordance with the terms hereof to such assignee without verifying the validity / legality / enforceability of the assignment.
16. This Guarantee shall be governed by the laws of India. Any suit, action, or other proceeding arising out of, connected with, or related to this Guarantee or the subject matter hereof shall be subject to the exclusive jurisdiction of the courts of **Delhi**, India.

Dated this day of 20XX at

(Signature)

.....

(Name)

.....

(Designation with Bank Stamp)

Attorney as per

Power of Attorney No.....

Date.....

<p>APPENDIX II NIT NO: CMC/BY/20-21/RB/SV/29</p>	<p>Page 3 of 7</p>	<p>Bidders seal & signature</p>
---	----------------------------------	-------------------------------------

BYPL 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: 911020005246583
5. IFSC Code: UTIB0000055



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

UNDERTAKING GST

The Vendor shall give an undertaking in the following words on each invoice in the absence of which tax payment as on the Vendor's invoice may be withheld.

"The tax component as mentioned in the invoice shall be deposited with GST Department as per law by way of actual payment or by way of legal set off as per law. The turnover billed shall be duly declared in my GST returns a copy of which shall be filed with the Purchaser. Should the input tax credit to the Purchaser be denied by way of any lapse on the part of the Vendor, the same shall be paid on demand and in any case the Purchaser is authorized to deduct the tax equivalent amount from the amount payable to the Vendor"

APPENDIX II NIT NO: CMC/BY/20-21/RB/SV/29	Page 5 of 7	Bidders seal & signature
--	-------------	--------------------------

SUMMARY OF COMMERCIAL TERMS AND CONDITIONS

SI No	Item Description	AS PER BYPL	BIDDER'S CONFIRMATION
1	Validity	120 days from the date of submission of bid	
2	Price basis	a) " Firm ", FOR Delhi store basis. Prices shall be inclusive of all taxes & duties, freight upto Delhi stores. b) Unloading at stores shall be in vendor's scope c) Transit insurance in Bidders scope	
3	Payment terms	As per NIT	
4	Delivery schedule	GTP/Drawings/QAP/etc to be submitted within 15 days to the concern official in BYPL for Transmittal approval. BYPL shall approve/ provide comments on the submitted drawings within 15 days of first submission. Delivery shall be completed within 16 Weeks from the LOI/PO date or completion as per the schedule	
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 the basic (ex-works) price of undelivered units or part thereof subject to maximum of 10% of total basic (ex-works) price 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 dispatch, whichever is earlier plus 3 months towards claim period	

COMMERCIAL TERMS AND CONDITIONS SUMMARY -I/T/C

Sl 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/ each site completion within 30 days from the date of issue or order / intimation of site.	
5	Penalty for delay	0.5 % of the basic order value for each week or part there of delay until the actual date of completion up to a maximum deduction of 5% of basic order value	

VOLUME – II

PRICE BID FORMAT

GRAND SUMMARY

ALL PRICES IN INR (₹)

Package Name	Quantity (Nos) (Q)	Supply Prices-Landed (A)	Erection, Testing and commissioning prices (B)	Comprehensive AMC (C)	Unit Package Cost (D=A+B+C)	Total Package Cost (E=C*Q)
SITC OF NEW 200 kWh CAPACITY BATTERY ENERGY STORAGE SYSTEM (BESS) ALONG WITH ALLIED EQUIPMENTS AND WORKS	05					

The Un-priced bid should be marked as **"Quoted"** and to be submitted with Part – A

We declare that the following are our quoted prices in INR for the entire packages.

Date:

Bidders Name:

Place:

Bidders Address:

Signature:

Designation:

Printed Name:

Common Seal:

SUPPLY

ALL PRICES IN INR (₹)

S. No.	DESCRIPTION OF GOODS	HSN CODE (8 Digit Mandatory)	Uo M	QTY (A)	UNIT BASIC PRICE INCL FREIGHT (₹) (B)	UNIT GST & CESS AS APPLICABLE (CGST & SGST/UTGST or IGST) (₹) (C)		UNIT LANDED COST (₹) (D = B+C)	TOTAL LANDED COST (₹) (E = DXA)
						%	AMT		
1	SUPPLY OF NEW 200 kWh CAPACITY BATTERY ENERGY STORAGE SYSTEM (BESS) ALONG WITH ALLIED EQUIPMENTS AND WORKS)		Nos	05					
GRAND TOTAL LANDED COST (₹)									
In words									

NOTE: Cost of all type/special tests as per technical specification is to be quoted separately.

I/T/C

ITEM DESCRIPTION/ WORK	QTY	UoM	UNIT RATE	GST AS APPLICABLE	TOTAL LANDED COST
E/T/C – OF NEW 200 kWh CAPACITY BATTERY ENERGY STORAGE SYSTEM (BESS) ALONG WITH ALLIED EQUIPMENTS AND WORKS as per SOW	05	Nos			
Comprehensive AMC per year within Defect Liability period (05 years X 05 Nos = 25 Nos)	25	Nos			
Comprehensive AMC per year post Defect Liability period	05	Nos			
Transportation of Package from store to site or vice versa may also be furnished in case the site is not ready (i.e., Loading, Transportation & Unloading)	01	PU			

NOTE

- 1) Item-wise cost for Installation, erection, testing & Commissioning for the items indicated in BOQ-SUPPLY and as per Scope of Work
- 2) In addition, Unit Rates shall be submitted as indicated in BOQ-ERECTION

VOLUME – III

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATION

FOR

BATTERY ENERGY STORAGE SYSTEM

FOR

DISTRIBUTION SUBSTATIONS

Rev 01	Date 07 Jan 2021	No. of Page 27
Prepared by	Abhishek Vashistha	<i>Abhishek Vashistha</i> 7a74fd4f-a398-49df-bd05-e398d5a949f0
Reviewed by	Puneet Duggal	<i>Puneet Duggal</i> 404db803-a91f-4234-85f0-0b2b5098ec32
	Sunil Sharma	<i>Sunil Sharma</i> f0f70920-f5ad-4e40-a172-43b1967ea96d
Approved by	Gaurav Sharma	<i>Gaurav Sharma</i> 23dc2de2-95de-4472-99a7-dea873f472b6
	Mukesh Dadhich	<i>Mukesh Dadhich</i> 42051dee-cbff-4527-ac99-0c22ea5e2642

TABLE OF CONTENT

1.0	SCOPE	3
2.0	CODES & STANDARDS	3
3.0	SERVICE CONDITIONS	4
4.0	GENERAL DESIGN FEATURES OF BESS	4
5.0	BESS SYSTEM ARCHITECTURE.....	5
6.0	BESS APPLICATIONS.....	5
7.0	BATTERY PARTICULARS.....	6
8.0	BATTERY ENERGY MANAGEMENT SYSTEM (BEMS) PARTICULARS	9
9.0	PROTECTION REQUIREMENT FOR BEMS	15
10.0	LT SWITCHGEAR PANEL.....	17
11.0	OUTDOOR ENCLOSURE PARTICULARS	19
12.0	ERECTION, TESTING & COMMISSIONING	21
13.0	INSPECTION & TESTING	22
14.0	WARRANTY TERMS & CONDITIONS.....	23
15.0	DEVIATIONS	23
16.0	PACKING.....	23
17.0	SHIPPING.....	25
18.0	HANDLING AND STORAGE	25
19.0	DRAWING AND DATA SUBMISSION MATRIX	26

1.0 SCOPE

This specification covers the Site survey, Planning, design, manufacture, transportation to site, supply at site, unloading, handling, storage, installation, integration, erection, testing, commissioning and demonstration of Li-ion Battery Energy Storage System (BESS) for Distribution Substations.

2.0 CODES & STANDARDS

Material, equipment and methods used in the manufacturing of Li-Ion battery shall confirm to the latest edition of following standard

National/International Standards for Battery Energy Storage System		
S No.	Requirements	Standards
2.1	Safety requirements	IEC-62133 or IEC 62620:2014 or UL-1642 or UL-1973 UL-9540 (for every components of BESS)
2.2	Performance tests, designations, markings, dimensions and other requirements	IEC 62619/62620
2.3	Test methods and requirements to ensure safety during transport other than for recycling or disposal	IEC 62281 or, UL-1973
2.4	Tests and requirements for verifying the mechanical behavior	IEC-61959/ IEC-62897
2.5	Protection of Stationary Battery Systems	IEEE 1375
2.6	Design, Operation & Maintenance of BESS	IEEE 2030.2.1-2019 or equivalent
2.7	Planning & Installation of Electrical Energy Storage System	IEC-62935
2.8	Guide for Selection and Use of BMS in Stationary Applications	IEEE 1491
National/International Standards related to operation & safety of PCS/ PCU, testing procedures and protection devices		
2.9	General and safety requirements	IEC 62040-1 or IEC 62477-1 or Equivalent
2.10	Interconnecting distributed resources with electrical power system	IEEE 1547 IEC 61850 (communication standard) UL 1741 (testing)

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

2.11	Power conditioners - Procedure for measuring efficiency	IEC 61683 or, Equivalent
2.12	Environmental testing	IEC 60068-2 (1,2,14,30)
2.13	Switches / Breakers / Connectors	IEC 60947 (1, 2, 3)
2.14	Power metering & monitoring devices	IEC 61557-12
2.15	Power quality parameters	IEEE 519-2003 or IEC 61000-4 series

3.0 SERVICE CONDITIONS

S No.	Parameter	BYPL Requirement	Bidder's Reply
3.1	Max Ambient Temperature	50 deg C	
3.2	Max Daily average ambient temp	40 deg C	
3.3	Min Ambient Temp	0 deg C	
3.4	Maximum Humidity	95%	
3.5	Minimum Humidity	10%	
3.6	Maximum annual rainfall	750 mm	
3.7	Average no of rainy days per annum	60	
3.8	Rainy months	June to Oct	
3.9	Altitude above MSL	300 M	
3.10	Seismic Zone	IV	

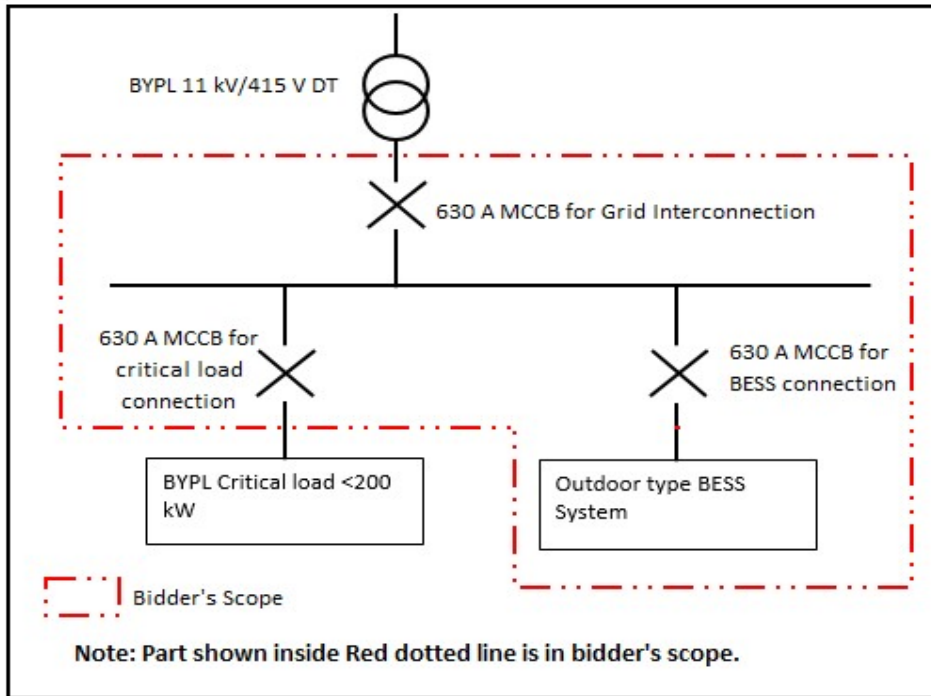
4.0 GENERAL DESIGN FEATURES OF BESS

S No	Parameter	BYPL Requirement	Bidder's Reply
4.1	Application	For Outdoor Distribution substation	
4.2	System Installation Capacity at each location		
4.2.1	Useful Power Conversion System rating	200 kW	
4.2.2	Useful DC battery bank kWh rating (usable capacity)	200 kWh	
4.2.3	Above mentioned installation capacity are the final delivered capacity after reduction of auxiliary power consumption (including AC Power consumption), BESS system loss, temperature de-rating etc and considering loss due to depth of discharge	To be confirmed	
4.2.4	Calculation for capacity assessment after reduction of auxiliary power	To be submitted by bidder	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
	consumption including Fan, AC etc and loos due to depth of discharge		
4.2.5	Calculation for effective battery capacity	To be submitted by bidder	
4.2.6	Final delivered as-manufactured PCS capacity	To be specified in kW	
4.2.7	Final delivered as-manufactured Battery capacity	To be specified in kWh	
4.2.8	Maximum ambient temperature to be considered for system capacity assessment calculation	50Deg C	

5.0 BESS SYSTEM ARCHITECTURE



6.0 BESS APPLICATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
6.1	Peak Shaving	Battery Discharge when DT loading exceeds the defined threshold	
6.2	Energy Time – Shift	BESS to draw power from grid for battery charging during off peak hours; battery discharge during peak hours	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

6.3	Reactive Power Support	Power conversion system (PCS) to meet reactive power requirement when real power demand is low, providing power factor compensation	
6.4	Critical Load Management	To serve the critical feeder of BYPL independently whenever required	

7.0 BATTERY PARTICULARS

S No	Parameter	BYPL Requirement	Bidder's Reply
7.1	Battery terminal Voltage Output	To be specified	
7.2	Battery Efficiency at 50 Deg C ambient	Bidder to specify	
7.3	Battery Round trip efficiency at recommended operation temperature	a. Specify recommended operation temperature b. Specify efficiency	
7.4	Gas Evolution from Battery	None	
7.5	Location of BESS system	Outdoor	
7.6	Installation	On Stainless steel rack/cabinet, painted with anticorrosive paint.	
7.7	Battery type	Li lo Battery	
7.8	Cell Chemistry	Bidder to specify Different chemistries of Li ion technology with material such as manganese, cobalt, iron, titanium etc are allowed subject to fulfillment of the required parameters as mentioned in this specification.	
7.9	Guaranteed complete charge and discharge cycles	>5000 No's	
7.10	Cycle Definition	Complete one charge cycle is used when an amount that equals 100% of battery's capacity is discharged — but not necessarily all from one charge. For instance, if 75% of your battery's capacity is	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
		used one day, then recharged it fully overnight. If 25% capacity is used the next day, then total discharged 100 % capacity, and the two days will add up to one charge cycle.	
7.11	Maximum permissible depth of discharge (DoD)	...%age; Bidder to specify	
7.12	Charging time from maximum permissible DoD to full charge	...Hours; Bidder to specify	
7.13	Guaranteed yearly Throughput energy output	...kWh; Bidder to specify	
7.14	Service life of battery system	...Years; bidder to specify	
7.15	Yearly %age degradation of battery capacity from date to installation till end of service life	End of Year 1 - % degradation Year 2 - % degradation Year 3 - % degradation And so on upto end of service life	
7.16	Battery charging rate	1C	
7.17	Battery Discharging rate	1C	
7.18	Battery lifting/withdrawing arrangement	Suitable arrangement on Module	
7.19	Battery Module marking	a. PO Number and Date b. Customer Name- BSES Yamuna Power Limited, c. Manufacturer name, d. Month & year of manufacturing e. Warranty Period f. Nominal voltage g. Rated kWh capacity h. Rated kW capacity i. Cell numbers j. C rate k. Customer Care Number	
7.20	Flame Arresters	Each cell shall be equipped with flame arrestor to diffuse any flammable gas escaped during charge/discharge	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
7.21	Pressure Regulation Valve	<p>a. Each cell shall be provided with a pressure regulation valve.</p> <p>b. Valve shall be self-sealable and flame retardant.</p> <p>c. Valve unit should not be opened without a proper tool.</p> <p>d. The valve shall be capable to withstand cell pressure specified by manufacturer.</p>	
7.22	Terminal polarity marking	Positive and negative marked on module	
7.23	Battery cell shorting metal links	Nickel plated copper with protective insulating sleeve	
7.24	Battery Energy density (kWh/Kg)	Bidder to specify	
7.25	Insulating shrouds	Required for all battery terminals & shorting links	
7.26	Insulating pads for battery rack	At the bottom of rack supports, made from high impact material	
7.27	Battery module suitability for interchangeability with other makes/manufacturers	Required	
7.28	Battery Disposal method	Once a storage device has reached the end of its useful life, the bidder should have a disposal or recycle plan for lithium ion batteries. The batteries should be in completely discharged condition prior to their disposal. The DC connection terminals of the batteries must be insulated with electric tape to prevent accidental contacts. The Li-ion batteries can be incinerated and the packaging materials shall be labeled as lithium ion batteries. Incineration must be performed by an	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
		approved and permitted waste treatment facility that handles lithium ion batteries	
7.29	Following shall be in the scope of Bidder regarding battery disposal	<p>a. To ensure that used batteries collected are sent to the registered recycling agencies or for disposal</p> <p>b. To ensure that necessary arrangements are made for safe transportation from site to the premises of recyclers or for disposal;</p> <p>c. To ensure that no damage to the environment occurs during transportation</p>	

8.0 BATTERY ENERGY MANAGEMENT SYSTEM (BEMS) PARTICULARS

S No	Parameter	BYPL Requirement	Bidder's Reply
8.1	BEMS Particulars	<p>a. Power Conversion System (PCS)</p> <p>b. Energy Management System (EMS)</p> <p>c. Monitoring, Data acquisition & Control system</p>	
8.2	Power Conversion System Particulars & Functions		
8.2.1	Power Conversion function	<p>a. AC to DC conversion during battery charging</p> <p>b. DC to AC conversion during battery discharging</p>	
8.2.2	Associated equipment	<p>a. Include charge controller and associated control & protection system</p> <p>b. Equipped with isolation Transformer</p>	
8.2.3	Filters	Contain adequate in-built harmonic filter for operation without deteriorating quality of power in terms of power factor, harmonics, transients,	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
		flickers etc.	
8.2.4	Local LCD display	Local LCD display to monitor parameters locally viz. charging/ discharging, voltage, current, power, alarm etc	
8.2.5	Waste heat removal	In air cooled system: Waste heat rejection shall be done to ambient air. Air handling system to have filters to stop entrance of dust inside PCS.	
		In oil cooled system: Provision to monitor coolant leaks, alarming & protection	
8.2.6	Monitoring functions	Shall monitor battery sub system for a. Total output voltage b. state of charge c. cell temperature d. cumulative no. of cycles along with depth of discharge e. charging/ discharging current f. power quality parameters g. any other parameter essential for monitoring health of battery	
8.2.7	Charge control functions	a. Charge control of each cell based upon power/energy requirements b. Charge battery in float/boost mode as per requirement c. shall regulate float/boost voltage in case of prescribed temperature rise of battery to avoid thermal runaway	
8.2.8	Active/Reactive control function	Power a. Shall be capable to provide both active and reactive power as per requirement limited to rated capacity of system in all four quadrants. b. change in delivery of	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
		active/reactive power towards load side over range of 0-100%.	
8.2.9	Operation mode	PCS shall be connected with distribution grid at three phase 415volt network. Beyond this voltage limit, PCS shall disconnect itself from grid automatically. After normalization of voltage condition, it shall restart/reconnect automatically.	
8.2.10	Auxiliary power supply	Auxiliary loads of BESS such as fan, light, air conditioning etc shall be supplied through AC bus of PCS.	
8.2.11	PCS Efficiency at 50 Deg C ambient	Bidder to specify	
8.2.12	PCS Efficiency at recommended operation temperature	a. Specify recommended operation temperature b. Specify efficiency	
8.3	Energy Management System (EMS) Particulars & Functions		
8.3.1	Particulars	Hardware and software for managing BESS for specified application	
8.3.2	Functions	Capability to tune BESS for a. Peak Shaving b. Energy Time - shift c. Reactive power support d. Critical Load Management	
8.3.3	Interoperability	a. EMS design to be inter – operable with any other EMS or distributed energy resource management system (DERMS) of BYPL. b. Capable to take and accept analog/digital data from other BESS of similar/different size and with different technology.	
8.3.4	License for Energy management software	a. Perpetual license of Energy management software shall be provided to	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
		BYPL and shall be installed in BYPL servers b. Server size requirement for software installation to be specified by bidder	
8.4	Monitoring, Data Acquisition and control system		
8.4.1	Direct SCADA Interface	4G Modem with backward compatibility to 2G/3G shall be provided for integration with SCADA on IEC 104 protocol	
8.4.2	SCADA Interface through Substation FRTU	Suitable port for communication over RS 485 with substation RTU on IEC 103 and MODBUS protocol	
8.4.3	Time synchronization	Provision for synchronization with SCADA clock through SCADA interface port and modem	
8.5	Key Battery Parameters to be integrated with SCADA		
8.5.1	Battery Remaining Capacity (RC)		
8.5.2	Battery State of Charge (SOC)		
8.5.3	Battery State of Health (SOH)		
8.5.4	Battery cycle Count		
8.5.5	Battery Voltage		
8.5.6	Battery Current		
8.5.7	Max. Cell Voltage		
8.5.8	Min. Cell Voltage		
8.5.9	Max. Cell Temperature		
8.5.10	Min. Cell Temperature		
8.5.11	On/Off status of all circuit breakers		
8.5.12	Event and Fault logs from battery management system		
8.5.13	Events and fault logs from all relays		
8.5.14	Four quadrant metering		

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
	parameters for battery connection (Active, reactive and apparent power and energy) including current, voltage and power factor		
8.5.15	Four quadrant metering parameters for grid interconnection (Active, reactive and apparent power and energy) including current, voltage and power factor		
8.5.16	Four quadrant metering parameters for critical load connection (Active, reactive and apparent power and energy) including current voltage and power factor		
8.5.17	Status of fire, smoke, heat detection by fighting equipment		
8.6	SCADA Control Features to be provided		
8.6.1	Commands	Open and close of all BESS circuit breaker	
8.6.2	Configuration	<ul style="list-style-type: none"> a. Change of Local/remote control b. Charging/discharging configuration c. Change of operation modes i.e Auto/SCADA d. Change control logic for applications e. Protection relay parameter setting f. Battery over/under voltage alarm/tripping g. Battery over current alarm/tripping h. Temperature rise alarm/tripping 	
8.7	SCADA Event logging features to be specified		
8.8	BYPL SCADA system	ABB Network Manager	
8.9	BESS system response time	Bidder to specify	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
8.10	Islanding Capability	BESS system shall have Islanding capability. In case of grid failure, BESS system shall be able to feed connected critical load	
8.11	DT Load Sensing and Management		
8.11.1	BEMS shall be capable for continuous sensing and monitoring of DT phase and Neutral load currents	Required	
8.11.2	Discharging condition	Programmable as per site condition Range – bidder to specify	
8.11.3	Charging condition	Programmable as per site condition Range – bidder to specify	
8.11.4	Response time	Less than 1 sec	
8.12	Operation during specific time of day slot	BESS shall be suitable for required operation as per pre-programmed/defined time of day slot automatically	
8.13	Dynamic active and reactive power injection control	Power factor range to be specified by bidder	
8.14	Status LED	Dual color type	
8.15	SOC LED	Dual color type	
8.16	In-built data logging	Upto 6 months	
8.17	Safety Feature		
8.17.1	Module reverse polarity protection		
8.17.2	Internal fuse		
8.17.3	Controllable internal fuse		
8.17.4	Protective terminal covering to avoid unintentional contact		
8.17.5	Secondary level hardware protection for overvoltage		
8.17.6	Heat propagation resistant cell holding structure		
8.17.7	Overvoltage protection		
8.17.8	Under voltage protection		
8.17.9	Over charging current protection		
8.17.10	Over discharge current protection		
8.17.11	Over temperature during discharge protection		
8.17.12	Over temperature during charge protection		
8.17.13	Over internal FET temp protection		

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
8.17.14	Individual cell should have fuse shorting links		
8.17.15	Withstand a single cell failure within the battery module and overall battery capacity is not de-rate more than 4 %		
8.17.16	Within the battery module, cells should be used with calorific power value of not more than 40 kJ		
8.17.17	Individual cell level pressure gas valve and fuse level protection.		
8.18	Service life of Battery Energy Management System including PCSYears; bidder to specify	

9.0 PROTECTION REQUIREMENT FOR BEMS

S No	Parameter	BYPL Requirement	Bidder's Reply
9.1	Distinguish between external & Internal Faults	BESS system should be capable to meet the requirement	
9.2	Automatic reconnection	Shall occur for external faults; only after detection of healthy condition	
9.3	Protection relay	Protection functions not specified in this section but required for successful operation of BESS shall be deemed to be included in bidder's scope	
9.4	DC system protection	a. Over current b. Earth fault protection c. Over/under voltage d. Breaker failure protection e. Transient/surge protection	
9.5	AC system protection	a. Over current b. Earth fault protection c. Over/under voltage d. Breaker failure protection e. Transient/surge protection f. Synchronization check	
9.6	Protection for Temperature rise	Shall be installed for battery as well as PCS in following cases: a. Short circuit in batteries	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

		<ul style="list-style-type: none"> b. failure of temperature controller c. internal faults in batteries d. failure of electrolytic system e. any other internal/external condition which may increase the temperature of batteries / PCS 	
9.7	Protection due to fault in grid	Grid fault detection and auto islanding function shall be provided	
9.8	Emergency Disconnection	<p>Provision for automatic as well as manual disconnection of BESS if:</p> <ul style="list-style-type: none"> a. Protection system fail is detected during self – diagnostic, control health check b. Breaker trip coil or interrupting device fails c. DC supply is lost 	
9.9	Emergency stop button	Shall be provided in PCS console which can be manually operated for emergency conditions like communication failure or any other hardware or software failure which prevents remote operation of PCS through monitoring and control system	
9.10	Fire Fighting	<ul style="list-style-type: none"> a. Appropriate active fire protection system shall be provided to tackle fire incident likely to arise in BESS system. b. Fire, Smoke and heat detection and extinguishing system shall be installed in all compartments of BESS enclosure c. Same to be integrated with BYPL SCADA. 	

10.0 LT SWITCHGEAR PANEL

S No	Parameter	BYPL Requirement	Bidder's Reply
10.1	Configuration	<p>Panel should have copper bus bar arrangement suitable for following connections</p> <ol style="list-style-type: none"> Grid Interconnection PCS Connection Critical Load Connection <p>LT Panel shall have dust-tight and vermin-proof sheet steel cabinets suitable for outdoor installation. The board shall preferably be of single front type.</p>	
10.2	Motorized MCCB with microprocessor based release		
10.2.1	For Grid Interconnection	630A	
10.2.2	For PCS Connection	630A	
10.2.3	For Critical Load Connection	630A	
10.2.4	Make of MCCB	Bidder to specify	
10.2.5	Number of Phases	Three Phase	
10.2.6	MCCB mounting	Fixed type	
10.2.7	Line-Load Reversibility	Required	
10.2.8	Operating mechanism	Electrical and manual spring charging, stored energy type	
10.2.9	Operation counter	4 digit minimum, non-reversible	
10.2.10	Operating handle	Required	
10.2.11	Indications	Separate ON / OFF / TRIP & spring charge status	
10.2.12	Ingress protection (without enclosure)	IP2X minimum	
10.2.13	Pollution degree as per IS	2 – non-conductive pollution	
10.2.14	Rated Operational Voltage(V)	415V	
10.2.15	Rated Insulation Voltage (V)	1000V	
10.2.16	Rated Impulse Voltage	8 kV for main circuit	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
10.2.17	Category of utilization	B	
10.2.18	Rated Ultimate breaking capacity at rated voltage	Icu = 50kA minimum	
10.2.19	Rated Service breaking capacity at rated voltage Ics	Ics = 100% Icu	
10.2.20	Rated short term withstand current for 1 sec at rated voltage - Icw	Icw = 100% Icu	
10.2.21	Rated making current capacity - Icm	Icm = 220% Icu	
10.2.22	Number of operating cycles at rated current (open + close) without changing arcing contact	5000	
10.2.23	Number of mechanical operating cycles (open + close)	20000	
10.2.24	Temperature rise limits	As per table 2 & 3 of IS 13947-1	
10.2.25	Product Information marking	As per clause 5 of IS: 13947 Part-I.	
10.2.26	Auxiliary contacts	6 NO + 6 NC minimum	
10.2.27	Operating knob sealing	Possible in OFF condition	
10.2.28	Fault indication on front panel	Required	
10.2.29	Release and Tripping mechanism	Microprocessor based release with true RMS based sensing	
10.2.30	Protections Required	Overload, short-circuit & earth fault	
10.2.31	Tripping characteristic	With long time & short time characteristics	
10.2.32	Overload setting	40% - 100% In, steps of 10%.	
10.2.33	Overload setting time delay	2.5 s to 40 s minimum three settings	
10.2.34	Short Circuit Setting	100% - 800% of In, steps of 10%.	
10.2.35	Short Circuit Setting time delay	100ms - 400 ms in steps of 100ms	
10.2.36	Instantaneous setting	400% - 1500% of In & OFF	
10.2.37	Earth fault setting	10- 100 % of In, steps of 10%	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
10.2.38	Earth fault setting time delay	100ms - 400 ms in steps of 100ms	
10.2.39	Power requirement	self powered, not tapped from neutral	
10.2.40	Metering	Energy Meter of accuracy class 0.5 as per IS14697 shall be provided for the following <ul style="list-style-type: none"> a. Grid Interconnection – Four quadrant metering b. Battery Connection – Four quadrant metering c. Critical Load Connection 	
10.2.41	Cable termination provision for grid interconnection	4c x 300sqmm	
10.2.42	Cable termination provision for Critical Load connection	4c x 300sqmm	
10.2.43	Connection with battery system	To be specified by bidder	

11.0 OUTDOOR ENCLOSURE PARTICULARS

S No	Parameter	BYPL Requirement	Bidder's Reply
11.1	Configuration	Complete BESS system with all associated equipment should be mounted in a single enclosure. This includes – <ul style="list-style-type: none"> a. Battery of specified technology b. LT switchgear panel with protection system c. Power conversion system d. Battery energy management system inclusive of Power conversion system, Energy Management system and associated Monitoring & control system 	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
		<p>e. Mandatory spares, maintenance tools & tackles</p> <p>f. Outdoor type enclosure for complete BESS system</p> <p>g. Any other associated materials and accessories necessary for trouble-free installation, O&M of above system</p> <p>h. CCTV surveillance system for installation at outdoor substation with real-time recording shall be provided</p> <p>Each of the above components shall be mounted in a separate compartment so that fault in one component does not affect the other.</p>	
11.2	Footprint	Bidder to specify. Most compact design shall be preferred	
11.3	Material	<p>a. Galvanized steel sheets processed through 7 tank process.</p> <p>b. Suitable for outdoor installation</p> <p>c. Sheet steel thickness 3 mm (minimum)</p>	
11.4	IP Protection	IP 56	
11.5	Enclosure color	RAL 7032 (Siemens Grey)	
11.6	Accessibility	Doors of appropriate size with padlocking arrangement shall be provided on each side of the enclosure to access equipment for ease of operation and maintenance. Bolted covers will not be acceptable.	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
11.7	Operation	Operating height for any equipment should not be more than 1600mm.	
11.8	Transparent window	Shall be provided at appropriate locations for viewing indications without opening the enclosure doors	
11.9	Air-conditioning	Should be provided to maintain BESS temperature within permissible limits. Air-conditioning system shall have two units. Each unit should be rated for full capacity required to maintain the temperature of BESS within permissible limits. This is required to maintain N-1 contingency.	
	Air conditioner Rating	No's – Rated capacity of each unit	
11.10	Earthing provision	Two earthing points to be provided on the enclosure	

12.0 ERECTION, TESTING & COMMISSIONING

S No	Parameter	BYPL Requirement	Bidder's Reply
12.1	Civil Work	Civil work for construction of the foundation of 450 mm height for placement of BESS container shall be in bidder's scope	
12.2	Testing	Testing as per approved QAP shall be in bidder's scope	
12.3	Commissioning	Following is included in bidder's scope a. Power cable connection between Distribution transformer and BESS. (Power cable shall be free issue from BYPL) b. Power cable connection between critical load	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
		and BESS(Power cable shall be free issue from BYPL) c. Integration of BESS system with BYPL network including integration with BYPL SCADA	
12.4	Enclosure Earthing	Bidder shall earth the enclosure at two locations as per as per IS 3047	
12.5	Training	a. Two days classroom training on working operation and maintenance of BESS b. Two days onsite training on working operation and maintenance of BESS	

13.0 INSPECTION & TESTING

S No	Parameter	BYPL Requirement	Bidder's Reply
13.1	Quality assurance plan	Needs to be submitted for approval	
13.2	Type test	Equipment shall be type tested from CPRI/ERDA/NABL accredited lab or an equivalent international Lab as per IEC/IS/UL standard.	
13.3	Routine test	As per relevant standard	
13.4	Acceptance test	To be performed in presence of Owner at manufacturer works shall be as per approved QAP	
13.5	Heating Compliance	JIS C8712	
13.6	ROHS Compliance	Required	
13.7	Quality Assurance plan	To be submitted by vendor	
13.8	Type test	IS/IEC/UL	
13.9	Routine test		
13.10	Acceptance test	To be performed in presence of Owner at manufacturer works shall be as per approved QAP	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
13.11	Heating Compliance	JIS C8712	
13.12	ROHS Compliance	Required	

14.0 WARRANTY TERMS & CONDITIONS

S No	Parameter	BYPL Requirement	Bidder's Reply
14.1	Warranty of BESS System	Warranty shall be for period of 5 Years.	
14.2	Comprehensive AMC	Bidder shall submit a separate techno commercial offer of additional comprehensive AMC for 5 years after completion of system warranty of 5 years	

15.0 DEVIATIONS

Deviation from this specification shall be stated in writing with the tender by reference to the specification clause/ GTP/ Drawing and description of alternative offer. In absence of such a statement, it shall be assumed by the buyer that the seller complies fully with this specification.

16.0 PACKING

S No	Parameter	BYPL Requirement	Bidder's Reply
16.1	Packing Protection	Against corrosion, dampness, heavy rains, breakage and vibration. During transportation/ transit and storage, module may be subjected to outdoor conditions. Hence, packing of each panel shall be weatherproof.	

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

16.2	Packing for accessories and spares	Robust wooden non-returnable packing case with all the protection & identification Label	
16.3	Packing Identification Label to be provided on each packing case with the following details		
16.3.1	Individual serial number		
16.3.2	Purchaser's name		
16.3.3	PO number (along with SAP item code) & date		
16.3.4	Equipment Tag no. (if any)		
16.3.5	Destination		
16.3.6	Project Details		
16.3.7	Manufacturer / Supplier's name		
16.3.8	Address of Manufacturer / Supplier / it's agent		
16.3.9	Description and Quantity		
16.3.10	Country of origin		
16.3.11	Month & year of Manufacturing		
16.3.12	Case measurements		
16.3.13	Gross and net weights in kilograms		
16.3.14	All necessary slinging and stacking instructions		

17.0 SHIPPING

S No	Parameter	BYPL Requirement	Bidder's Reply
17.1	Shipping	The bidder shall ascertain at an early date and definitely before the commencement of manufacture, any transport limitations such as weights, dimensions, road culverts, Overhead lines, free access etc. from the Manufacturing plant to the project site. Bidder shall furnish the confirmation that the proposed Packages can be safely transported, as normal or oversize packages, up to the site. Any modifications required in the infrastructure and cost thereof in this connection shall be brought to the notice of the Purchaser.	
		The seller shall be responsible for all transit damage due to improper packing.	

18.0 HANDLING AND STORAGE

S No	Parameter	BYPL Requirement	Bidder's Reply
18.1	Handling and Storage	Manufacturer instruction shall be followed. Detail handling & storage instruction sheet / manual needs to be furnished before commencement of supply.	

19.0 DRAWING AND DATA SUBMISSION MATRIX

- Document checklist for each stage is given in table below. Documents shall be submitted in soft copy.
- Document check sheet compliance shall be the first sheet for each submission stage i.e. Technical bid, Drawing Approval, Pre Dispatch, Pre closure.
- No submission is acceptable without check list compliance.
- Deficient/ improper document/ drawing submission shall be liable for rejection.
- Order of documents shall be strictly as per the check list.
- Any drawing not included in the below table but necessary for detailed engineering shall be deemed to be included in bidder's scope.

S No	Head	Bid	Drawing Approval	Pre Dispatch	Pre Closure
19.1	Contact Person Name, Email ID and Mobile Number	Required	Required		
19.2	Consolidated Deviation Sheet	Required	Required		
19.3	Compliance WRT specification parameters	Required	Required		
19.4	Relevant Type Test as per IS/IEC/UL	Required			
19.5	Manufacturer's quality assurance plan and certification for quality standards		Required		
19.6	Sizing Calculation of Equipment	Required			
19.7	Recommended Spares for five years of operation)	Required			
19.8	BESS System drawing				
19.8.1	General Arrangement	Required	Required		
19.8.2	Sectional Layout		Required		
19.8.3	Cabinet Layout		Required		
19.8.4	Battery Layout		Required		
19.8.5	SLD	Required	Required		
19.8.6	Schematic Circuit diagram of each component		Required		
19.8.7	Communication Architecture		Required		
19.8.8	QAP		Required		

TECHNICAL SPECIFICATION OF BATTERY ENERGY STORAGE SYSTEM FOR DISTRIBUTION SUBSTATIONS

S No	Head	Bid	Drawing Approval	Pre Dispatch	Pre Closure
19.8.9	BOQ		Required		
19.8.10	Plan		Required		
19.8.11	Foundation Diagram		Required		
19.8.12	Make of all Component as per specification		Required		
19.8.13	Drawing of Substation Room		Required		
19.9	Installation, erection and commissioning manual		Required		
19.10	Inspection Reports			Required	
19.11	As manufacturing Drawings			Required	
19.12	Operation and Maintenance Manual			Required	
19.13	Trouble shooting manual			Required	
19.14	As built Drawings				Required
19.15	Test Report				Required