

# **Tender Notification for**

**Supply of Different Types of Feeder Pillars** 

NIT NO CMC/BR/22-23/RB/PR/FH/1062 DT 15.09.2022

Due Date for Bid Submission: 05.10.2022 1530HRS

BSES RAJDHANI POWER LIMITED,
BSES Bhawan, Nehru Place, New Delhi-110019 Corporate Identification Number:
U74899DL2001PLC111527 Telephone Number: +91 11 3999 7235

Fax Number: +91 11 2641 9833 Website: www.bsesdelhi.com



# <u>SECTION - I: REOUEST FOR OUOTATION</u>

#### **Event Information**

BRPL invites sealed tenders in 2 envelopes for **SUPPLY OF DIFFERENT TYPES OF FEEDER PILLARS** from reputed manufacturers. The bidder must qualify the technical requirements as specified in clause 2.0 stated below. All envelopes shall be duly super scribed as **"SUPPLY OF DIFFERENT TYPES OF FEEDER PILLARS, "NIT No- CMC/BR/22-23/RB/PR/FH/1062, DT 15.09.2022"** 

S. No	Item	Technical Specification	Estimated Cost	Qty.	Delivery
1	Supply of Different Types of Feeder Pillars	1)BSES-TS-48-FPP-R0 2)BSES-TS-115-FSDFP-RO	1.11 Cr	As per Price Format	New Delhi Stores

The schedule of specifications with detail terms & conditions can be obtained from address given below against submission of non-refundable demand draft of **Rs.1180/-(With GST)** drawn in favour of BSES Rajdhani Power Ltd, payable at Delhi. The tender documents & detail terms and conditions can also be downloaded from the website "www.bsesdelhi.com --> Tenders --> BSES Rajdhani Power Ltd --> 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.

The bids shall be addressed to:

Head of Department Contracts & Materials Deptt. BSES Rajdhani Power Ltd. C&M Deptt. 1<sup>st</sup> Floor, C Block BSES Bhawan, Nehru Place New Delhi 110019

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

Tender will be summarily rejected if:

- Earnest Money Deposit (EMD) of value INR 2,22,000/- is not deposited in shape of Bank Draft/Pay Order/Banker's Cheque/BG drawn in favour of BSES Rajdhani Power Ltd, payable at Delhi.
- The offer does not contain "FOR NEW DELHI" price indicating break-up towards all taxes, duties & freight.
- Complete Technical details are not enclosed.
- > Tender is received after due date and time.



## 2.0 Qualification Criteria:-

The prospective bidder must qualify all of the following requirements to be eligible to participate in the bidding. Bidders who meet following requirements will be considered as Successful bidder and BRPL has a right to disqualify those bidders who do not meet these requirements.

- 1) The bidder should have own manufacturing facility in India for Feeder Pillar / LT Panel since last 3 years.
- 2) The Bidder should have supplied minimum 100 Nos of Feeder Pillar / LT Panel of similar rating or higher in last 5 years from the date of bid opening to any utilities/SEB's/PSU's/reputed company (wherein the end user shall be Utility/SEB's/PSU's)
- 3) The bidder should submit 2 years satisfactory Performance Certificates of Feeder Pillar / LT Panel of similar rating or higher supplied in last 5 years from at least two utilities/SEB's/PSU's/reputed (company wherein the end user shall be Utility/SEB's/PSU's)
  - In case of bidder has a previous association with BRPL/BYPL for similar product and service, the performance feedeback for that bidder by BRPL/BYPL shall only be considered irrespective of performance certificate issued by any third organization
- 4) The bidder should have manufacturing capacity of minimum 30 nos. Feeder Pillar / LT Panel per month
- 5) The bidder should have servicing , repairing, testing & refurbishment facility in INDIA with necessary spares and testing equipments for providing prompt after sales service for Feeder Pillar / LT Panel
- 6) The Bidder must posses valid ISO 9001:2015 certification
- 7) Bidder should have Average Annual Sales Turnover of Rs20 Crores or more in last three (3) Financial Years (i.e., FY 2018-19, 2019-20 & 2020-21).
- 8) The Bidder shall submit an undertaking that "No Litigation" is pending with the BRPL or its Group/Associates Companies.
- 9) An undertaking (self-certificate) that the bidder has not been blacklisted/debarred by any central/state government institution/Electricity utilities
- 10) The bidder must have valid PAN No., GST Registration Number, in addition to other statutory compliances. The bidder must submit the copy of registrations and submit an undertaking that the bidder shall comply all the statuary compliances as per the laws/rules etc. before the start of the supply/work.

NOTE: - For SL NO-2 of qualification criteria data to be submitted as per annexure-VII

## 3.0 Bidding and Award Process.

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

## **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 Rajdhani Power Ltd 1<sup>st</sup> Floor, C Block, BSES Bhawan, Nehru Place New Delhi 110019



#### **PART A: TECHNICAL BID** comprising of following (in duplicate)

**EMD** 

Non-refundable demand draft for Rs 1180/- in case the forms are downloaded from website

Documentary evidence in support of qualifying criteria

Technical Literature/ GTP/Type test report etc

Qualified Manpower available

**Testing Facilities** 

Original Tender documents duly stamped & signed on each page as token of acceptance

Acceptance to Commercial Terms and Conditions viz Delivery schedule/period, Payment terms, BG etc

Power of Attorney for signing the bid

#### **PART B: FINANCIAL BID** comprising (1 original only)

 Price strictly in the Format enclosed in SECTION V indicating Break up of basic price, taxes & duties, Freight etc

#### **TIME SCHEDULE**

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

S.No.	Steps	Date
1	Date of sale of bid documents	15.09.2022, onwards
2	Last date of Queries, if any	26.09.2022, 1500hrs
3	Last date of receipt of bid documents	05.10.2022, 1530hrs
4	Date & time of opening of tender – Part A	05.10.2022, 1600hrs
5	Date & Time of opening of Part B of qualified bidders	Only Successful bidders

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

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

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

#### Bidders are requested to submit the bid in one Original plus one copy in duplicate

<u>P art – A:</u> Technical Bid should not contain any cost information whatsoever and shall be submitted within the due date.

<u>P ART B:</u> This envelope will be opened after techno-commercial evaluation and only of the qualified bidders. 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.

## Part -C: E- Bidding and Reverse Auction through SAP-SRM Module

Purchase reserves the right to use the reverse auction through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are techno-commercial qualified on the basis of tender requirements shall participate in reverse auction.

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



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

#### **Award Decision**

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

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.

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

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

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

## **Market Integrity**

We have a fair and competitive marketplace. The rules for bidders are outlined in the Terms & Conditions. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the Terms & Condition. Bidders who violates 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.

#### **6.0 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 BRPL. This includes all bidding information submitted.

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

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

#### 7.0 Contact Information

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

Contact	Technical	Commercial
Person	to CES	To:- faiyaz.hussain@relienaceada.com
	Copy to : Pankaj Goyal	Copy to : Pankaj Goyal
Address	BSES RAJDHANI Power Ltd ,5th Floor , 20 No Building, Nehru Place,New Delhi 110019	C&M Deptt. 1st Floor , D-Block, BSES RAJDHANI Power Ltd BSES Bhawan, Nehru Place, New Delhi 110019
Email	Amit.as.tomar@releianceada.com	Pankaj.goyal@releianceada.com



## <u>SECTION - II: INSTRUCTION TO BIDDERS</u>

#### A. GENERAL

#### 1.00

BSES Rajdhani 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 as 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.

#### **DISCLAIMER**

- 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.
- 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.
- 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.
- 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).

## 4.00 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**

The Scope of Work, Bidding Procedures and Contract Terms are described in the Bidding Documents are as follows:

#### Volume - I

- > Request for Quotation (RFQ) Section I
- > Instructions to Bidders (ITB) Section II
- Terms & Conditions of Contract (T&C) Section -III
- Delivery schedule Section IV
- > Technical Specifications (TS) Section V (Pages Enclosed)



Volume - II

Price Format - Annexue -I
 Bid Form - Annexure -II
 Acceptance Form for Reverse - Annexure -III
 Auction

EMD BG Format - Annexure -1V
 Commercial Terms & Conditions- Annexure -V
 No Deviation Sheet - Annexure -VI

**5.00** 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.

#### **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 6.01, and it will be notified in web site <a href="https://www.bsesdelhi.com">www.bsesdelhi.com</a> and the same will be binding on them.
- 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 <a href="https://www.bsesdelhi.com">www.bsesdelhi.com</a>
  - Purchaser shall reserve the rights to following
    - extend due date of submission
    - modify tender document in part/whole
    - cancel the entire tender

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.

#### **DOCUMENTS COMPRISING THE BID**

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



Bid Form, Price & other Schedules (STRICTLY AS PER FORMAT) and Technical Data Sheets completed in accordance with Technical Specification.

All the Bids must be accompanied with the required EMD as mentioned in the Section-I against each tender.

Tender documents duly stamped and signed on each page by authorized signatory.

#### 9.0 BID FORM

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

#### **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:

Banker's Cheque/Demand Draft/Pay Order drawn in favour of BSES Rajdhani Power Ltd, payable at Delhi.

A bank guarantee issued by any scheduled bank strictly as per the format enclosed and shall be valid for a period of thirty (30)days beyond the validity of the bid

The EMD may be forfeited in case of:

✓ the Bidder withdraws its bid during the period of specified bid validity

or

- √ the case of a successful Bidder, if the Bidder does not
  - accept the Purchase Order, or
  - Furnish the required performance security BG.

#### **BID PRICES**

- 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.
- 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" during the performance of the Contract.



#### 11.0 BID CURRENCIES

Prices shall be quoted in Indian Rupees Only.

#### 12.0 PERIOD OF VALIDITY OF BIDS

- 12.01- Bids shall remain valid for 120 days from the due date of submission of the Bid.
- **12.02** -Notwithstanding Clause 12.01 above, the Purchaser may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and the responses thereto shall be made in writing and sent by post/courier

#### **13.0 ALTERNATIVE BIDS**

Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the Bidding Documents.

#### 14.0 FORMAT AND SIGNING OF BID

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

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

**14.02** 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

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.

The Technical Documents and the EMD shall be enclosed in a sealed envelope and the said envelope shall be super scribed with —"**Technical & EMD**". The price bid shall be inside another sealed envelope with super scribed as "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 super scribed with —"Tender Notice No & Due date of opening".

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

The original Bid, together with the required copies, must be received by the Purchaser at the address specified no later than the due date specified earlier

The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with Clause9.0, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended

#### 17.0 ONE BID PER BIDDER

Each Bidder shall submit only one Bid by itself. No Joint Venture is acceptable. A Bidder who submits or participates in more than one Bid will cause all those Bids to be rejected.

#### 18.0 LATE BIDS

Any Bid received by the Purchaser after the deadline for submission of Bids prescribed by the Purchaser, pursuant to Clause 16.0, will be declared "Late" and may be rejected and returned unopened to the Bidder.

#### 19.0 MODIFICATIONS AND WITHDRAWAL OF BIDS

The Bidder is not allowed to modify or withdraw its Bid after the Bid's submission.

#### E. EVALUATION OF BID

#### 20.0 PROCESS TO BE CONFIDENTIAL

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

## 21.0 CLARIFICATION OF BIDS

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

## 22.0 PRELIMINARY EXAMINATION OF BIDS / RESPONSIVENESS

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.

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.

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.



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

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

The evaluation of the Bids shall be a stage-wise procedure. The following stages are identified for evaluation purposes: In the first stage, the Bids would be subjected to a responsiveness check. The Technical Proposals and the Conditional ties of the Bidders would be evaluated.

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

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:

**Delivery Schedule** 

Conformance to Qualifying Criteria

**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.

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

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.

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 any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.



#### **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.

## Splitting of tendered quantity among two or more bidders:

BSES reserves the right to split the tender quantity among techno- commercially qualified bidders on account of delivery requirement in tender quantity under procurement.

For arranging timely procurement of material and to have uniform practice of distribution of quantity amongst eligible bidders, following procedure shall be applicable:

The tender quantity shall be split in following ratio:

- (i) If the quantity is to be split among 2 bidders, it will be done in the ratio of 70:30 on L1 price.
- (ii) If the quantity is to be split among 3 bidders, it will be done in the ratio of 60:25:15 on L1 price.

Any deviation in regards to above will have deviation approval from management.

#### 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

The successful Bidder shall furnish the Performance Bank Guarantee for an amount of 10% (Ten percent) of the Contract Price. The Performance Bond shall be valid for a period of 24 months from the date of Commissioning or 30 months from the date of last dispatch whichever is earlier plus 3 months claim period. Upon submission of the performance security, the EMD shall be released.

#### **30.0 CORRUPT OR FRADULENT PRACTICES**

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

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



- "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
- "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.

Furthermore, Bidders shall be aware of the provision stated in the Terms and Condition of Contract.

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

#### 1.0 General Instructions

All the Bids shall be prepared and submitted in accordance with these instructions.

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.

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.

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.

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.

#### **Definition of Terms**

"Purchaser" shall mean BSES Rajdhani Power Limited, on whose behalf this bid enquiry is issued by its authorized representative / officers.

"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.

"Supply" shall mean the Scope of Contract as described.



"Specification" shall mean collectively all the terms and stipulations contained in those portions of this bid document known as RFQ, Commercial Terms & Condition, and Instructions to Bidders, Technical Specifications and the Amendments, Revisions, Deletions or Additions, as may be made by the Purchaser from time to time.

"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.

"Month" shall mean the calendar month and "Day" shall mean the calendar day.

"Codes and Standards" shall mean all the applicable codes and standards as indicated in the Specification.

"Offer Sheet" shall mean Bidder's firm offer submitted to BRPL in accordance with the specification.

"Contract" shall mean the "Letter of Acceptance/Purchase Order" issued by the Purchaser.

"Contract Price" shall mean the price referred to in the "Letter of Acceptance/Purchase Order".

"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.

"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

3.01Contract 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

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.

Bidder shall have to guote for the Bill of quantities as listed in Section - IV of this RFQ.

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

All relevant drawings, data and instruction manuals.



#### 5.0 Quality Assurance and Inspection

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. In case of standard items, BRPL shall forward the standard QAP which is to be follow by vendor during manufacturing.

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 BRPL.

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.

On completion of manufacturing the items can only be dispatched after receipt of dispatch instructions issued by the Purchaser.

All in-house testing and inspection shall be done without 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.

Purchaser reserves the right to send any material being supplied to any recognized laboratory for testing, wherever necessary and the cost of testing shall be borne by the Bidder. In case the material is found not in order with the technical requirement / specification, the charges along with any other penalty which may be levied is to be borne by the bidder. To avoid any complaint the supplier is advised to send his representative to the stores to see that the material sent for testing is being sealed in the presence of bidder's representative.

### 6.0 Packing, Packing List & Marking

**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 BRPL, Delhi/New Delhi stores/site without undue risk of damage in transit.

**Packing List:** The contents of each package shall be itemized on a detailed list showing the exact weight, extreme outside dimensions (length, width and weight) of each container/box/drum/carton, Item SAP Code, PO No & date. One copy of the packing list shall be enclosed in each package delivered.

## 7.0 Price basis for supply of materials

Bidder to quote their prices on Landed Cost Basis and separate price for each item. **On Firm Price** for supply to BRPL site/ stores inclusive of packing, forwarding, loading at manufacturer's premises, Freight & GST.



#### Terms of payment and billing

For Supply of Equipments:

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

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

- i. Consignee copy of LR
- **ii.** Supplier detailed invoice showing commodity description, quantity, unit price, total price and basis of delivery.
- **iii.** Original certificate issued by BRPL confirming receipt of material at site and acceptance of the same.
- iv. Dispatch clearance & inspection report issued by the inspection authority
- v. Packing List.
- vi. Test Reports
- vii. Guarantee Certificate.

#### 9.0 Price Validity

**9.01** All bids submitted shall remain valid, firm and subject to unconditional acceptance by BRPL Delhi as mentioned earlier, the prices shall remain valid and firm till contract completion.

#### 10.0 Performance Guarantee

The bidder shall establish a performance bond in favor of BRPL 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.

Bank guarantee shall be drawn in favor of BSES Rajdhani Power Ltd as applicable. The performance Bank guarantee shall be in the format as specified by BRPL.

#### 11.0 Forfeiture

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 BRPL 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.

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

#### 12.0 Release

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



#### 13.0 Warranty/Defects Liability Period

**13.01 The** bidder to guarantee the materials / items supplied against any defect of failure, which arise due to faulty materials, workmanship or design for the entire defects liability period. The Defect liability period shall be 60 months from the date of commissioning or 66 months from the date of delivery whichever is earlier. If during the defects liability period any materials / items are found to be defective, these shall be replaced or rectified by the bidder at his own cost within 30 days from the date of receipt of intimation.

#### 14.0 Return, Replacement or Substitution.

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

#### 15.0 Effective Date of Commencement of Contract:

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

## 16.0 Time - The Essence of Contract

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

## 17.0 The Laws and Jurisdiction of Contract:

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

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

#### **Events of Default**

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 BRPL.

#### **Consequences of Default.**

- (a) If an Event of Default shall occur and be continuing, BRPL may forthwith terminate the Contract by written notice.
- (b) In the event of an Event of Default, BRPL 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 BRPL may incur as a result of Supplier's default.

#### 20.0 Penalty for Delay

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

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

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

## 21.0 Statutory variation in Taxes and Duties

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

#### **Force Majeure**

## 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.

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

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

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.

Mitigation of Events of Force Majeure Each Party shall:

- 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;
- 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
- 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.

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.

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.

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.

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.

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

#### 23.0 Transfer and Sub-Letting

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

#### 24.0 Recoveries

**24.01** Whenever 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?

#### 25.0 Waiver

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

#### Indemnification

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



# SECTION - IV:

# **QUANTITY AND DELIVERY REQUIREMENT**

S.No	Thom Description Consideration		Requirement		Location	
5.NO	Item Description	Specification	Qty.	Delivery Schedule	Location	
	BSES RAJDHANI POWER LIMITED					
1	Supply of Different Types of Feeder Pillars			As per BRPL requirement	New Delhi Stores	



# **SECTION - V**

# TECHNICAL SPECIFICATION (TS) SUPPLY OF DIFFERENT TYPE OF FEEDER PILLARS

NIT NO CMC/BR/22-23/RB/PR/FH/1062 DT 15.09.2022



# **TECHNICAL SPECIFICATION OF**

# **FSD FEEDER PILLAR**

Specification no - BSES-TS-115-FSDFP-R0

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Prepared by	Jeena Borana	Sen
Prepared by	Rohit Patil	PAGE.
	Srinivas Gopu	43
Reviewed by	Amit Tomar	Silve toto od 2012
Anna ad b	Gaurav Sharma	Ceaveren
Approved by	Gopal Nariya	0/14



# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

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# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

## 1. Scope of supply

This shall include Design, manufacture, testing at manufacturer's works before dispatch, and packing, delivery of material to BSES stores and submission of documents to purchaser.

## 2. Codes & standards

The equipment shall conform to this specification and latest revision of following codes with all amendments :

S. No.	Title	Indian standard	
2.1	IS 5039	Specification for distribution pillars below 1000V AC	
2.2	IEC60947 part 3	Low voltage switchgear	
2.3	IS 8623	Specification for low voltage switchgear Panel	
2.4	IEC60529	Classification of degrees of protection provided by	
		enclosures of electrical equipment	
2.5	IEC 60269	Low Voltage HRC fuses	
2.6	IS 613	Specification for copper	
2.7	IS 5082	Specification of wrought aluminum and aluminum alloy bars, rods,	
		tubes and selections for electrical purposes.	
2.8	IS 513	Cold reduced low carbon steel sheets and strips.	
2.9	IS 277	Galvanized steel sheets (Plain and corrugated)	
2.10	IS 14246	Continuously pre-painted galvanized steel sheets & coils-	

## 3. Service conditions

The feeder pillar panel shall be designed to work satisfactorily under following service conditions:

3.1	Location	At various location in Delhi
3.2	System Configuration	3 Phase 4 Wire with neutral solidly grounded
3.3	Supply Voltage	415 volt +/- 10%
3.4	Supply frequency	50Hz
3.5	Location	Outdoor
3.6	Maximum ambient temperature (°C)	50
3.7	3.7 Minimum ambient temperature (°C) 0	
3.8	Maximum altitude above mean sea level	1000
	(m)	
3.9	Relative Humidity (%)	100
3.10	Seismic Zone	Zone IV as per IS : 1893
3.11	Incoming supply to feeder pillar panel	From distribution transformer or Main feeder pillar panel



# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

# 4. Feeder Pillar configuration

The feeder pillar panel shall have following configuration:

4.1	Feeder pillar type	Incoming feeder (circuit ways)	Outgoing feeder (circuit ways)
4.1.1	8 way with bus coupler	2 x 630A TP vertical Fuse Switch Disconnector	6 x 400A TP vertical Fuse Switch Disconnector
4.1.2	5 way without buscoupler	1 x 630ATPvertical Fuse Switch Disconnector	4 x 400A TP vertical Fuse Switch Disconnector
4.2	Incoming feeder	3 phase Vertical fuse switch disconnector with HRC fuse link having V-Box aluminum terminal suitable for connecting 25 to 300 sq.mm aluminum cablewithout need for crimping socketsto reduce power loss.	
4.3	Outgoing feeder	3 phase Vertical fuse switch disconnector with HRC fuse link having V-Box aluminium terminal suitable for connecting 25 to300 sq.mm aluminium cables without need for crimping socketsto reduce power loss.	
4.4	Buscoupler	3 phase vertical fuse switch disconnector buscoupler with 630A solid link/HRC fuse link	
4.5	Neutral bus bar	Shall be provided at the bottom of panel, with M10 Nut-Bolts for terminating incoming & outgoing feeder cable neutral circuit. Nut bolts on earth & neutral bus bar should be in zigzag manner so that no nut bolt comes one over the other	

# 5. Panel construction

The feeder pillar panel construction shall conform to following features:

		Free standing, floor mounted withsteel base
		frame.
	Welded construction	Continuous welding from inside, Spot welding not
		acceptable.
5.2	Ingress protection class for	IP 55as per IEC 60529
	enclosure	
5.3	Enclosure Material	GI sheet of 120 gsm (min)
5.4	GI sheet thickness	3 mm - Support frames
		2.5 mm Galv Covers, Doors & Canopy
5.5	Bottom Plate (along the depth &	Undrilled Gland plate shall be provided for
	width of the pillars)	suitable cable inputs
5.6	Pedestal for 8 way + buscoupler	ISA 35x35x5 mm of height 400mmwith side
	and 5 way feeder pillar	covers of MS 3 mm thick sheet. Front & back
		sheets will be 3 mm thick black in colour.
	Pedestal Treatment	Including front & back sheets, entire pedestal



# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

		shall be chemically Pr	e-treated &black powder
		coating on it.	·
5.7	Cable entry	From bottom only thro	ough gland plates
5.7.1	GI sheet	Cable termination shall be through gland plates. The blank portion after gland plate at the bottom of pillar shall be closed with 2.5 mm thick GI sheet.	
5.8	Lifting lug	2 Nos. lifting lug of sui top.	itable thickness welded on
5.9	Canopy on top	With minimum 10 <sup>0</sup> slopanel front & rear whe	pe extended 25 mm outside en doors closed
5.10	Door type	Centre opening double	
5.11	Door opening	Front only no rear acc	
5.12	Double leaf doors	hand side leaf with ref	
5.13	Door hinges	Minimum three anti-theft reversible type hinges from inside of the pillar. For provision of reversible hinges, pillar powder coating is done on complete pillar (door fitted with body). In case if this poses problem during powder coating, manufacturer to fix door in such a way that it will have interlocking with canopy and cannot be removed at site.	
5.14	Door opening angle	Min 120°	
5.15	Padlocking facility	For front door. Nut bolt should be provided for padlocking	
5.16	Spring loaded locking facility on right hand side door	Required, as approved – ensuring proper alignment of doors with no gaps in between the LHS & RHS door. Locking arrangement shall be preferably 3 point spring loaded completely made of stainless steel grade 304 rust free.	
5.17	Master key for all doors		al for all panels, 1 no. /
5.18	Tower bolts at top & bottom of door	Shall be heavy duty ty	ppe. Made of Al materials on reference to operator
5.19	Phase & neutral bus as per IS 5082		01 WP range 2with minimum
5.20	Bus bar size in mm	Phase	Neutral
5.20.1	8 way with buscoupler	80x10 mm	80x10 mm
5.20.2	5 way without buscoupler	60 x10 mm	60x10 mm
5.20.3	Earth bus at panel bottom	25x6mm Aluminum. Earth bus connected to earthing studs. Neutral bus & Earth bus shall be connected with use of 2 Nos. AL strips having same size of earth bus.	
5.21	Bus bar arrangement	Horizontal, with R pha	ise bus at top
5.22	Neutral bus bar	Shall be provided with holes for connecting outgoing cables up to 300sq mm.	

# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

5.22.1	Bus bar support insulators	SMC / DMC, 1100v grade
5.23	Cable size	
5.23.1	Incoming cable for 8 way+buscoupler	Ph – 3Cx 25 to 300sq mm per phase with V-Box Aluminium Terminalwithout need for crimping sockets
5.23.2	Outgoing cable for 8 way +buscoupler	Ph – 3Cx 25 to 300 sq mm per phase with V-Box Aluminium Terminal without need for crimping sockets
5.23.3	Incoming /outgoing cable for 5 way	Ph – 3Cx 25 to 300 sq mm per phase with V-Box Aluminium Terminalwithout need for crimping sockets
5.24	Gland plate at panel bottom (refer enclosed drawing)	<ul> <li>AI, 3 mm thick for single core cable. These holes shall be blocked using rubber grommets.</li> <li>MS, black powder coated, 3mm thick for multi core cables. These gland plates shall be undrilled type.</li> </ul>
5.25	Cable supports	Non ferrous clamps (Al material) at bottom for 300 sq mm cable in 8 Way + buscoupler & 5 Way
5.26	Cable termination clearance from gland plate	450mm minimum. Bidder to specially note this for pillars having vertical SDF, as incomer in the pillar.
5.27	Earth studs on both side of panel Bottom	With M10 hot dipped galvanized steel nut bolts. Earth stud from inside of the panel with bolt head outside. Nut bolts on earth and neutral busbar should be in zigzag manner so that no nut bolt comes one over other. Earth bus bar should be taken outside the pillar body. It shall be bent at the right angle from outside.
5.28	Gaskets	Doors of feeder pillar shall be provided with 3mm thick neoprene gasket. Feeder pillar is installed outdoor hence manufacturer shall use Araldite as adhesive while sticking the gasket on MS surface inside pillar.

## 6. Fuse Switch Disconnector

S. No.	Particulars	Requirement	
6.1	Make	<ul><li>Jean Mueller</li><li>ABB</li><li>Siemens</li><li>Pronutec</li><li>Merson</li></ul>	
6.2	Applicable Standard	IEC 60947-3	



# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

S. No.	Particulars	Requirement
6.3	Rated Operating Current	630A,400A
6.4	Rated Operational voltage	690V
6.5	Rated insulationvoltage	1000V
6.6	Incomerswitchable type	Three pole Gang operated
6.7	Outgoing switchable type	Single Pole
6.8	Padlocksand Safe lock Position	3Padlocks in safe lock position to ensure proper closing/opening of switch
6.9	Fuse Holding contact	Four Parallel line contacts with sacrificial electrodes to conduct and quench any arc away and reduce contact wear, in built short circuit interlock to prevent pinch effect. Fuse contacts are silver plated with 3µm thickness. Other copper parts should be tin plated with 3µm thickness
6.10	Fuselink rating and Size details	Fuse switch disconnector capable of taking a maximum of 630 A size 3 HRC fuses or any lower rating of size1 and size2 fuses for better interchangeability in case of emergency. Incoming – 630A, Size 3, Outgoing – 400A, Size -2
6.11	Rated Operating Frequency	50 Hz
6.12	Fuse protected short circuit withstand current	120kA at 500V
6.13	Rated short time withstand current	15kA for 1sec
6.14	Rated impulse voltage	12kV, Test Uimp across open contacts : 20kV
6.15	Glow wire test	Parts of insulating materials necessary to retain current-carrying parts in position shall conform to the glow wire tests of 8.2.1.1.1 of IEC60947-1 at a test temperature of 960°C
6.16	Fuse switch Operation	Single Hand with Hinged operation
6.17	Visibility of fuses blown out condition	Both middle and top of the fuse through easily visible windows



# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

S. No.	Particulars	Requirement
6.18	Measurement of voltage	Across a fuse holding contact without opening the switch and without fuse inserted in the contact
6.19	Material	The fuse holder should be made of polyamide with reinforced fibre glass. The device base/carrier should be made of fibre glass reinforced duroplastic (thermosetting plastic)
6.20	Individual Phase shroud	Each pair of contacts should be provided with individual shrouds to prevent accidental touching when the switch top cover isremoved.
6.21	Interchangeability – Top cover	Incoming / outgoing fuseswitch disconnector should be dimensionally compatible for easy interchangeability.
6.22	Maximum Depth of the FSD in closed position should be maximum refer drawing 1.2	202mm (approx.)
6.23	FSD depth maximum of the switch without handle for reduced size of feeder pillar, refer below drawing 1.2	154mm (approx.)
6.24	Center to centerBusbar mounting distance between Phases	185mm
6.25	Mechanism to remove the fuse	Through release button,inbuilt with the poles
6.26	Maximum 3 positions switch disconnector capable of assuming (refer drawing 1.1)	, , , , , , , , , , , , , , , , , , ,
6.27	Max Total power loss at Ith (without fuse-link)	115W@630A 54W@400A
6.28	Incoming/Outgoing cable size to be considered to the suitable V Box aluminum terminal and with suitable insulation cover at the terminal	3Cx 25 to 300 Sqmm, with suitable V Box aluminum Terminalwithout need for crimping socketsand insulation cover at the terminal
6.29	Mounting position	Vertical
6.30	Pole	3P/1P
6.31	Max power dissipation per fuse link	48W@630A 34W@400A
6.32	Degree of protection(With clamp and lateral covers)	IP30



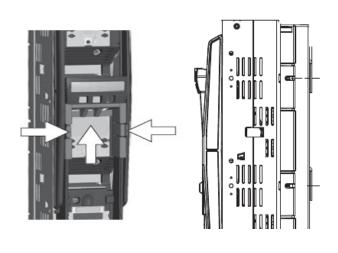
# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

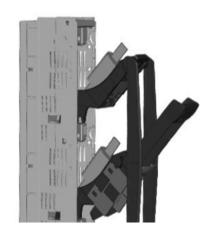
S. No.	Particulars	Requirement
6.33	Degree of protection(Operating condition - Closed)	IP20
6.34	Accessories should be allowed (Optional ) for future upgradation	Electronic Fuse Monitoring (EFM), Ammeters, Auxiliary Switches, Current transformers

# Drawing no 1.1

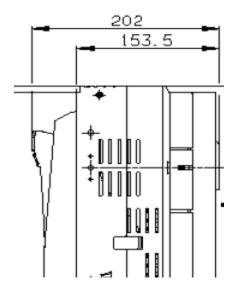
# 1-Safe Lock Position2-ON Position

# 3-Fuse fitting at Off Position





# Drawing no 1.2





# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

# 7. Operational requirements

7.1	Clearance between phase to phase	As per IS/IEC Standard
	& phase to earth	
7.2	Continuous rated operating voltage	433 volt +/- 10%
7.3	Power frequency high voltage	2500 Volt
	withstand capacity for one minute	
7.4	Insulation resistance value for phase	Minimum 100MΩ with 500v Megger
	& neutral bus bar	
7.5	Temperature rise above ambient	As per IS 13947_1
	50°C	

# 8. Name plate & finish

8.1	Name plate	(100 x 150 mm) Aluminum Anodized present on front & back door top center.
8.2	Name plate marking	<ul> <li>Product Name, Purchaser name &amp;PO number with date</li> <li>Manufacturer name</li> <li>Serial Number</li> <li>Month / year of manufacturing</li> <li>Material code</li> <li>IS: 5039, IP-55</li> <li>Property of 'BSES'</li> </ul>
8.4	Inner marking on doors	Safety Instruction Sheet should be pasted on the inner side of the RHS door with respect to operator. Serial numbers which will be provided by BSES shall be punched on the nameplate to be riveted on LHS front door.
8.5	Marking for panel earth stud	Black letter 'E', on riveted Al label
8.6	Danger board in English & local language, riveted on doors	White colour background with red lettering on 1.5 mm thick Al Plate.
8.7	Painting	Powder coating with min thickness 80 micron,semi-glossy finish
8.8	Paint shade	Shade -538/632 as per IS:5
8.9	Fluorescent strip painting / sticker on panel	50mm wide horizontal strip of fluorescent paint / sticker around panel as per drawing. Sticker to be approved.
8.10	There should not be any sharp corner Rounded	

# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

# 9. Testing & inspection

9.1	Type test	Only type tested components – fuse base, insulators & aluminum bus bar shall be accepted  Test reports as per relevant IS/IECto be submitted by vendor	
9.2	Test report validity	valid for last 5 years	
9.3	IP Test & Temperature Rise test	Shall be carried out from CPRI/ERDA	
9.4	Acceptance & routine test (Inspection test witness by purchaser)	1) Visual inspection, dimension checks & paint thickness check 2) Bill of material check 3) Wiring checks 4) Insulation resistance test for main & auxiliary circuit 6) High voltage test on main & auxiliary circuit 6) Operational check	
9.5	Tolerances on panel dimensions Maximum +/- 5mm		
9.6	No negative tolerance on bus bar dimensions & bus bar clearances		
9.7	Prototype panel to be approved by BSES		

# 10. Packing & delivery

10.1	Packing to be done using thermocol free and eco friendly material				
10.2	Packing protection Against shocks, vibration & corrosion, damages during transportation				
10.3	Packing identification labels	To show purchaser name, PO number, quantity of panels, Panel type, Manufacturer serial number.			
10.4	Handling instruction To be marked on packing boxes				

# 11. Deviation

11.	Deviations from this Specification shall be stated in writing with the tender by reference to the Specification clause/GTP/Drawing and description of the alternative offer. In absence of such a statement, it will be assumed by the Buyer that the Seller complies fully with this specification.



# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

## **Annexure A - Guaranteed Technical Particulars for the Panel**

Bidder to submit separate soft copy duly filled & signedGTP for each type of feeder pillar panel along with techno commercial offer.

S. No.	Item description	Requirement by Purchaser	Data by Vendor
1	Manufacturer	Name	
		Address	
		Contact telephone no	
2	Type of panel offered	8 ways with buscouplerand 5ways without buscoupler	
3	Main bus bar rating	As per clause 4.1 to 4.5	Yes / no
4	No of incoming feeders	Quantity	
		Rating in amp	
		HRC fuse type / make	
5	No of outgoing feeders	Quantity	
		Rating in amp	
		HRC fuse type / make	
6	Panel construction	GI Sheet (min 120 gsm) with powder coating	Yes / no
7	Panel enclosure class	IP55- ingress protection	
8	Sheet steel thickness	3 mm - Support frames 2.5 mm Galv Covers, Doors & Canopy	
9	Pedestal for 8 way, way with bus coupler, 5 way	ISA 35x35x5 having height 400mm with side covers of MS painted in black.	
10	Door type for front only	Centre opening double Leaf	Yes / no
11	Door hinges	Minimum three anti theft reversible type hinges	Yes / no
12	Padlocking facility	For front door with nut bolts	
13	Master key for all doors	Identical for all panels,1 no. per panel	
14	External steel hardware	Hot dipped Galvanized nut & bolts 8.8	Yes / no



# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

		Grade			
15	Phase & neutral Bus bar	Aluminum grade 63401WP range 2 as per IS.			
16	Bus bar size in mm	Phase	<u> </u>		
16.1	8 way with buscoupler	80x10 m	m 80	x10 mm	
16.2	6 way without buscoupler	60x 10m	m 60	x 10mm	
17	Earth bus size	25x6mm	Aluminu	m	
18	Main bus bar short circuit withstand capacity	50 kA for	1 sec		
19	Main bus bar maximum temperature rise	above ar	nbient		
20	Bus bar support Insulators	SMC / D	MC, 110	0v grade	
21	Terminals suitable for cables size (For incomer of 9way / 5 way – M16 nut bolt)	Ph – 3Cx 25 to 300 sq mm per phase with V-Box aluminum terminal without need for crimping sockets&neutral – 1Cx300sq mm with suitable size lugs.			
22	Incoming cable for 9& 5 way panel	Ph – 4C> with V-Bo need for 1Cx300s	ox Alumi crimping		
23	Outgoing cable for 9,& 5 way	1Cx300sq mm with suitable size lugs.  Ph – 4Cx 25 to 300 sq mm per phase with -Box Aluminium terminal without need for crimping sockets&neutral – 1Cx300sq mm with suitable size lugs.			
24	Gland plate at panel Bottom ( refer enclosed drawing)	Al 3mm t MS 3mm	hick for		
25	Cable termination Clearance	450mm r	minimum		
26	Earth studs on both side of panel bottom	With M10 steel nut			
27	Panel maximum dimensions in mm	Width Depth Height			
28	9 Way				
29	6 Way				
30	Fuse base Size as per	Size 2 for 400A			
31	- IS	Size 3 for 630A			



# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

32	Fuse base current carrying part	Tin / Silver Plated minimum 3µm copperas per IS 191	Yes / no
33	Make	Panel builder	
34	Clearance between live	Phase - phase &	
	parts minimum As per	Phase – earth	
	IS/IEC standard		
35	Continuous rated operating voltage	433 volt +/- 10%	
36	High voltage withstand Capacity	2000 volt at 50 Hz for 1 Minute	
37	Insulation resistance	Minimum 100MΩ	
	ph–ph&ph-earth	with 500v Megger	
38	Labels & name plates	as per specification	Yes / no
39	Painting	Power coated PP Paint of reputed make	
40	Shade - Post office red	Shade –538/632 as per IS:5	
41	Fluorescent paint strip on panel	As per Clause 8.10	
42	Neoprene gasket	3 mm gasket to be provided from inside of door. Araldite adhesive shall be used for sticking the gasket.	
43	Panel drawings	submitted with GTP	Yes / no
44	Test certificate for panel class for IP55	Copy of TC from third party test lab	
45	Deviation list	submitted with GTP	Yes / no

# **Annexure B - Guaranteed Technical Particulars for the Fuse Switch Disconnector**

	Particulars	Requirement
1	Make	Specified by the bidder
2	Applicable Standard IEC 60947-3	Yes/No
3	Rated Operating Current 630A incomer , 400A outgoing	Yes /No
4	Rated Operational Voltage 690V	Yes/No
5	Rated insulation voltage minimum 1000V	Yes/No



## BSES-TS-115-FSDFP-R0

# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

6	Three pole gang operated fuse switch disconnector – Incoming and Outgoing	Yes/No
7	Safe lock position to ensure proper closing/opening of switch with 3padlocks – Incoming and Outgoing fuse switch Disconnector	Yes/No
8	Fuse Holding contact – Delta	Yes/No
9	Fuselink fixing ranges from Size 1 to Size 3 to Incoming and outgoing fuse switch Disconnector	Yes/No
10	Rated Operating Frequency -50 Hz	Yes/No
11	Rated Operational Current AC-21B (I <sub>e</sub> )690V at 630A& 400A	Yes/No
	Rated Operational Current AC-22B (I <sub>e</sub> )500V at 630A& 400A	
	Rated Operational Current AC-23B (I <sub>e</sub> )400Vat 630A& 400A	
12	Fuse protected short circuit withstand current – 120KA	Yes/No
13	Rated short time withstand current – 15kA for 1sec	Yes/No
14	Rated impulse voltage -12kV, Test Uimp across open contacts- 20kV	Yes/No
15	Glow wire tested	Yes/No
16	Fuse switch Operation - Single hand and Hinged	Yes/No
17	Visibility of Fuse blown out condition	Yes/No
18	Measurement of voltage across a fuse holding contact without opening the switch	Yes /No
19	The fuse holder should be made of polyamide with reinforced fibre glass. The device base/carrier should be made of fibre glass reinforced duroplastic (thermosetting plastic)	
20	Each pair of contacts should be provided with individualshrouds to prevent accidental touching when the switch top cover isremoved.	
21	Incoming / outgoing fuseswitch disconnector should be dimensionally compatible for easy interchangeability	
22	Maximum Depth of the FSD in closed position should be maximum 202mm with FSD depth maximum 154 mm, refer below drawing 1.2	Yes/No



# BSES-TS-115-FSDFP-R0

# TECHNICAL SPECIFICATION OF FSD FEEDER PILLAR

23	Suitable V Box aluminum Terminalwithout need for crimping socketswith insulation cover at terminal to be provided for the cable incoming/outgoing of 3Cx 25 to 300sqmm	Yes/No
24	Center to center Bus bar mounting distance between phases 185mm	Yes/No
25	Mechanism to remove the fuse through release button	Yes/No
26	Maximum 2positions switch disconnector capable of assuming (refer drawing 1.1) closed and replacement of fuse in open positions	Yes/No
27	Max Total power loss at Ith (without fuse-link) 115W-630A 54W-400A	Yes/No
28	Mounting position Vertical	Yes/No
29	No of poles – 3	Yes/No
30	Max power dissipation per fuse link34@400A and 48W@630A	Yes/No
31	Degree of protection(With clamp and lateral covers) IP 30	Yes/No
32	Degree of protection(Operating condition - closed) IP20	Yes/No
33	Accessories should be allowed (Optional ) for future upgradation Electronic Fuse Monitoring (EFM), Ammeters, Auxiliary Switches, Current transformers	Yes/No



# TECHNICAL SPECIFICATION OF FEEDER PILLAR PANEL

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Prepared by	Rohit Patil	PARA
	Srinivas Gopu	25
Reviewed by	Amit Tomar	Reduction
Approved by	Gaurav Sharma	Ceaurait
	K. Sheshadri	Lee Bloy 22



## TECHNICAL SPECIFICATION OFFEEDER PILLAR PANEL

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#### **TECHNICAL SPECIFICATION OFFEEDER PILLAR PANEL**

#### 1.0 SCOPE OFSUPPLY

This shall include Design, manufacture, testing at manufacturer's works before dispatch, and packing, delivery of material to BSES Stores and submission of documents to purchaser.

#### 2.0 CODES &STANDARDS

Materials, equipment and methods used in the manufacture of Feeder Pillar shall conform to the latest edition of following:

S No.	Standard	Description	
2.1	IS 5039	Specification for distribution pillars below 1000v AC	
2.2	IS 13947 part 2	Low Voltage switchgear	
2.3	IS 8623	Specification for low voltage switchgear	
2.4	IS 12063	Classification of degrees of protection provided by enclosures of electrical equipment	
2.5	IS 13703	Low voltage HRC fuses	
2.6	IS 5	Color of ready mixed paints	
2.7	IS 191	Specification for copper	
2.8	IS 5082	Wrought Aluminum & Al alloy plates & sheets for electrical applications	

#### 3.0 SERVICECONDITIONS

The feeder pillar panel shall be designed to work satisfactorily under following service conditions:

3.1	Supply Voltage	3 phase neutral, AC 433Volt +/-10%
3.2	Supply Frequency	50 Hz +/- 5%
3.3	Location of panel	Outdoor, on foot path or roadside
3.4	Pollution	Heavily Polluted and Dry
3.5	Humidity	90% maximum
3.6	Ambient Temperature	Average 40° C, Maximum 50° C
3.7	Incoming supply to feeder pillar panel	From distribution transformer or Main feeder pillar panel
3.8	Seismic Zone	4



#### **TECHNICAL SPECIFICATION OFFEEDER PILLAR PANEL**

#### 4.0 FEEDER PILLAR CONFIGURATION

The feeder pillar panel shall have following configuration:

Sr. No.	Feeder Pillar Type	Incoming feeder (Circuit ways ) & Cable size	Outgoing feeder (Circuit ways) & Cable size
4.1	A-1 , 8-Way	2 X 630A TP fuse base 2 X 400A Fuse Link	6 X 400A TP fuse base 6 X 250 A Fuse Link
		Cable size 4CX300Sqmm	Cable size 4CX150Sqmm
4.2	B-1, 5-Way		
		Cable size 4CX300Sqmm	Cable size 4CX150Sqmm

#### **5.0 PANEL CONSTRUCTION**

The feeder pillar panel construction shall conform to following features:

Sr. No.	Parameters	Technical Requirement	
5.1	Panel Construction	Free Standing floor mounted with steel frame	
5.2	Welded Construction	Continuous welding from inside, Spot welding not acceptable.	
5.3	Ingress Protection class for enclosure	IP 55 as per IS 12063	
5.4	Enclosure Material	GI sheet of 120 gsm (min)	
5.5	Sheet Thickness	3 mm - Support frames 2.5 mm Galv Covers, Doors & Canopy	
5.6	Base frame for 8 Way & 7 waypanel	3mm MS Channel 50mm height painted in Black Color	
5.7	Bottom holes on four Sides	Oval Shape, for grouting bolts	
5.8	Cable entry	From Bottom only	
5.9	Lifting Lug	2 no's lug welded on top	
5.10	Canopy on top	With minimum 10° C slope extended 50mm outside panel front and rear	
5.11	Panel Opening	Panel opening arrangement shall be from one of the options below as per site requirement :  a) Door at front and rear side or	



Sr. No.	Parameters	Technical Requirement
		b) Door at front side and bolted cover at rear side
5.12	Door type for front & rear access	Centre Opening double leaf with insulating rubber grip handle
5.13	Double leaf doors	Right hand side leaf can be opened only after left hand side leaf
5.14	Door Hinges	Minimum three anti-theft type hinges
	_	MS screw -3mm dia. & 8mm length
		Tight fit brass tube - 100mm ID, 12.7mm OD & 20mm length
5.15	Door Opening angle	Min 120 <sup>0</sup>
5.16	Padlocking facility	For Front and Rear door by total 4 no's L- drop arrangement. 2 no's front door and 2 no's rear door.
5.17	Locking facility on door	By L- drop type arrangement or latch lock(as per requirement)
5.18	Tower bolts at top and bottom of door	On left hand side door
5.19	External hardware	Galvanized steel nut and bolts
5.20	Phase & Neutral bus as per IS 5082	Aluminum grade 19501 (H2)
5.21	Bus bar color coding for R, Y,B and Neutral	Heat shrinkable tape of color Red, Yellow, Blue & Black respectively.
5.22	Bus Bar size in mm	Phase Neutral
5.22.1	8 – Way	50X12mm 50X12 mm
5.22.2	5 – Way	50X12mm 50X12 mm
5.23	Bus for 8 – Way	Bolted type removable link to be provided at middle of all the phases and neutral bus bar to adapt two incomers from separate source.
5.24	Earth Bus at panel Bottom	25X6mm Aluminum
5.25	Bus bar arrangement	Horizontal, with R phase bus at top
5.26	Neutral bus bar	With holes for connection incoming and outgoing cables up to 300Sqmm



Sr. No.	Parameters	Technical Requirement
5.27	Bus Bar support insulators	SMC / DMC, 1100v Grade
5.28	Bus Bar phase barriers	FRP / Acrylic insulating sheet
5.29	Cable Size	
5.29.1	Incoming	4CX300Sqmm cable
5.29.2	Outgoing	4CX150Sqmm cable
5.30	Terminals for cables	Al grade 19501 (H2) as per IS 5082, with galvanized steel nut bolts size M10 & two plane washers + spring washers & spacers
5.04	<del></del>	M16 size nut bolt for incomer
5.31	Terminal shape	'z'Strips
5.32	Z Strip dimensions supported on	Incomer 50X10 mm
	insulators	All outgoing feeders 40X10 mm
5.33	Ease of taking current reading with open clamp type ammeter	Possible with Z Strip terminal
5.34	Gland plate at panel bottom	Galvanized MS, 3mm thick for multi core cable
5.35	Cable supports	Non-ferrous clamps at bottom/HDPE
5.36	Cable termination clearance from gland plate	300mm minimum
5.39	Earth studs on both side of panel bottom	With M10 galvanized steel nut bolts
5.40	Flexible earth connection todoors	Flexible PVC Cu wire 2.5 sqmm green color
5.41	Panel maximum dimensions inmm	Width Depth Height
	8 – Way	1250 600 1800
	5 – Way	900 550 1850
5.42	Tolerances on panel dimensions	Maximum +/- 5mm

## **TECHNICAL SPECIFICATION OFFEEDER PILLAR PANEL**

Sr. No.	Parameters	Technical Requirement
5.43	Holder for lamp for 8 way panel	230v Incandescent lamp controlled through 2amp SPMCB
5.44	Small power socket for 8 way panel	5/15 amp 3pin socket controlled through 16amp SPMCB with toggle switch

## 6.0 FUSEBASE AND LINK

The equipment shall have all the following features :

6.1	Fuse base connection to main bus bar	By bus bar and not by flexible jumpers
6.2	Size of Fuse Base	3 for 630A 2 for 400A
6.3	Current rating of fuse base at maximum ambient temperature 50° C	a) For Incomers: 630A b) For Outgoings:400A
6.4	Fuse base current carrying part	Plated copper as per IS191
6.5	Fuse base insulating material	DMC / Porcelain
6.6	Make	For DMC - GE, Siemens, L&T, ABB For porcelain- Sample to be approved by BSES
6.7	Fuse base mounting screws	With insulating caps
6.8	FRP Barriers for open live parts	1.6mm thick white colored sheet
6.9	HRC fuse pullers – 1 no / Type of fuse	Suitable for 400A, 250A HRC fuse
6.10	Fuse Link Make	Siemens/L&T/Bussmann/ABB

## 7.0 OPERATIONAL REQUIREMENTS

7.1	Clearance between phase to phase and phase to earth	Minimum 25mm
7.2	Continuous rated operating voltage	433 volt +/- 10 %
7.3	Power frequency high voltage withstand capacity for one minute	2000V
7.4	Insulation resistance value for phase and neutral busbar	Minimum 100MOhmwith500V Megger
7.5	Temperature rise above ambient 45° C	As per IS 13947_1

#### **TECHNICAL SPECIFICATION OFFEEDER PILLAR PANEL**

## 8.0 NAME PLATE AND FINISH

8.1	Name plate	On front door top left side showing		
		1) Customer name		
		2) PO no. and Date		
		3) Manufacturer name		
	4) Item			
		5) Item Code		
		6) Sr. No.		
		7) Month & year of manufacturing		
		8) Warranty Period		
8.2	Labels for incoming and outgoing feeders	Sticker type labels inside panel door		
8.3	SLD	SLD to be screen printed inside the front door.		
8.4	Marking for panel earth stud	Green letter 'E', on riveted AL label		
8.5	Danger board in English and local language, riveted on doors	Danger plate shall be as per IS:2551		
8.6	Painting	Powder coated grade A polyester paint with m thickness 85 microns		
8.7	Paint shade	Shade – 632 (Dark Admiralty Grey)/Shade – 538 (Post-office red); as per IS-5		
8.8	Fluorescent strip painting on panel	50mm wide horizontal strip of fluorescent paint around panel in the middle of panel		

## 9.0 QUALITY ASSURANCE PLAN, INSPECTION AND TESTING

S No.	Parameters	Technical Requirements		
9.1	Quality Assurance Plan	QAP Shall be submitted by vendor for approval. Inspection and testing of the equipment shall be carried out accordingly.		
9.2	Type test	<ul> <li>a) Feeder Pillar must be of type tested as per relevant IS. Type test conducted either from CPRI/ERDA will be treated as valid.</li> <li>b) Only type tested components – fuse base, fuse links, insulators and aluminum bus bar shall be accepted.</li> </ul>		
9.3	Routine /Acceptance test	<ul> <li>a) Visual inspection, dimension checks and paint thickness check.</li> <li>b) Bill of material check</li> <li>c) Wiring checks</li> <li>d) Insulation resistance test for main and auxiliary circuit</li> <li>e) High voltage test on main and auxiliary circuit</li> <li>f) Operational check</li> <li>g) No negative tolerance on bus bar dimensions and bus bar clearances</li> </ul>		

## **TECHNICAL SPECIFICATION OFFEEDER PILLAR PANEL**

S No.	Parameters	Technical Requirements
		h) Prototype panel to be approved by BSES
9.4	Inspection	<ul> <li>a) The buyer reserves the right to inspect equipment at the Seller's works at any time prior dispatch, to verify compliance with the specifications.</li> <li>b) In-process and final inspection call intimation shall be given in 15 days advance to purchaser.</li> <li>c) In the event of any discrepancy in the test reports i.e. test reports not acceptable or any type tests (including special /additional tests, if any) not carried out, same shall be carried out without any cost implication to BSES before dispatch of equipment.</li> </ul>
9.5	Test certificates	Test certificates (routine and acceptance) shall be submitted along with the dispatch documents.

# 10.0 PACKING, SHIPPING, HANDLING & SITE SUPPORT

10.1	Packing	The packing shall be fit to withstand rough handling during transit and storage at destination. The material should be properly protected against corrosion, shocks, vibration, dampness & damage.
10.2	Packing Identification Label	On each packing case, following details are required:  a) Individual serial number b) Purchaser's name c) PO number (along with SAP item code, if any) & date d) Equipment Tag no. (if any) e) Destination f) Manufacturer / Supplier's name g) Address of Manufacturer / Supplier / it's agent h) Description i) Month & year of Manufacturing
10.3	Shipping	The seller shall give complete shipping information concerning the gross weight, size of each packing.
10.4	Handling & Storage	Manufacturer instruction shall be followed. Detailhandling & storage instruction sheet/manual needs to be furnished before commencement of supply.
10.5	Transit damage	The seller shall be responsible for any transit damage due to improper packing.



#### **TECHNICAL SPECIFICATION OFFEEDER PILLAR PANEL**

#### 11.0 DEVIATIONS

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

#### 12.0 DOCUMENT SUBMISSION MATRIX

Document/Drawing submission shall be as per the matrix given below. All documents/drawings shall be provided in soft copy only in returnable Pen drives. Language of the documents shall be English only. Incomplete submission shall be liable for rejection.

S No.	Description	Bid	Approval	Pre Dispatch
12.1	Guaranteed Technical Particulars (GTP)	Required	Required	
12.2	Deviation Sheet, if any	Required	Required	
12.3	General Arrangement and Dimensional drawing	Required	Required	
12.4	Installation Instruction		Required	Required
12.5	Type test reports(not more than 5 years old) from CPRI/ERDA	Required	Required	
12.6	Routine Test Certificates			required
12.7	Make of Raw Materials	Required	Required	
12.8	Manufacturer's quality assurance plan and certification for quality standards		Required	
12.9	Test certificates of all raw materials			Required
12.10	Inspection and routine test reports, carried out in manufacturer's works			Required

#### **List of Annexures**

**Annexure A- Guaranteed Technical Particulars** 

Annexure B- GA Drawing of 5 way panel

Annexure C- GA Drawing of 8 way panel

#### **TECHNICAL SPECIFICATION OFFEEDER PILLAR PANEL**

#### Annexure-A

#### **Guaranteed Technical Particulars**

Bidder to submit hard copy duly filled and signed along with techno commercial offer. Bidder to submit separate GTP for each type of feeder pillar panel

S. No	Particulars	BSES Requirement	Vendor Data
		Name	
1	Manufacturer	Address	
		Contact no.	
2	Type of Panel Offered	8-way , 5-Way	
3	Main bus bar rating	As per clause 5.22	
		Quantity	
		Rating in amp	
4	No. of Incoming feeders	HRC fuse type / make	
		Quantity	
		Rating in amp	
5	No. of Outgoing feeders	HRC fuse type / make	
6	Panel construction	GI sheet of min 120 gsm	
7	Panel enclosure class	MinIP55- ingress protection	
8	Galvanized sheet thickness	2.5 mm min. for cover, doors & canopy	



S. No	Particulars	BSES Requirement	Vendor Data
9	Base frame	3mm MS channel 50mm height painted in black color	
10	Door	As per site requirement:  a) Door at front and rear side or  b) Door at front side and bolted cover at rear side	
11	Door type for front & rear access	Centre opening double leaf with insulating rubber grip handle	
12	Door Hinges	Minimum three anti-theft type hinges	
13	Padlocking facility	Provided	
14	L- drop type locking arrangement at door	2 no's of each front and rear door	
15	External steel hardware	Galvanized nut & bolts	
16	Phase & neutral bus bar	Aluminum grade 19501 (H2) as per IS5082	
17	Bus bar color coding for R, Y, B & neural.	Heat shrinkable tape of Red, Yellow, Blue & Black color	
18	Bus bar size in mm	Phase - 50X12mm Neutral - 50X12mm	
19	Earth bus size	25x6mm Aluminum	
20	Main bus bar short circuit withstand capacity	In KA for 1sec	
21	Main bus bar maximum temperature rise	above ambient of 45° C	
22	Bus bar support insulators	SMC / DMC, 1100V grade	

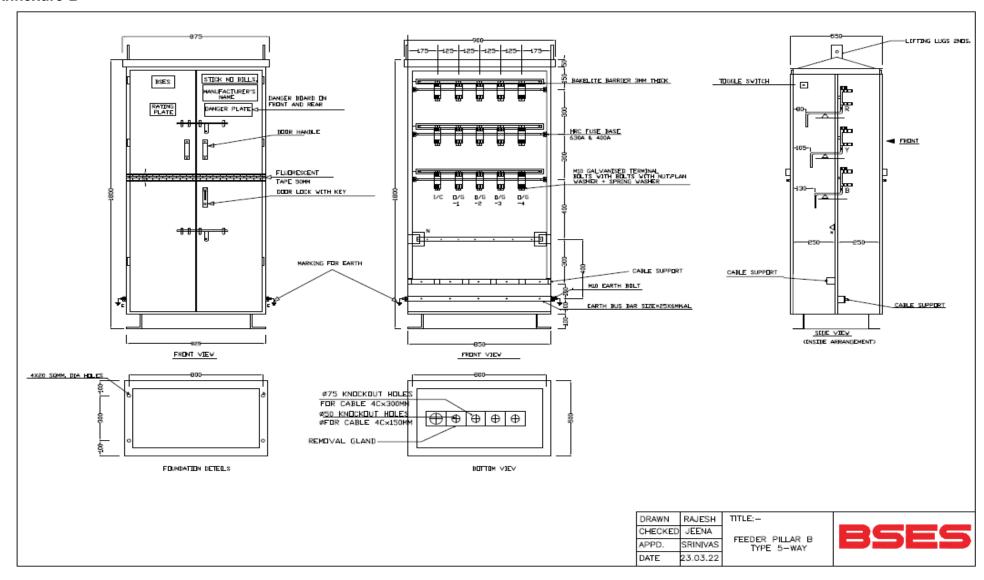


S. No	Particulars	BSES Requirement	Vendor Data
23	Terminals suitable for	Al grade 19501 ( H2) as per IS 5082, with galvanized steel nut bolts size M16 & two plane washers + spring washers & spacers	
24	Incoming cable	4CX300Sqmm	
25	Outgoing cable	4CX150Sqmm	
26	Terminal shape	'Z' strips supported on insulator	
27	Z Strips dimensions	8waypanel Incomers: 50x10 mm Outgoings: 40x10 mm	
28	Gland plate at panel bottom	Galv. MS 3mm thick for multi core cable	
29	Cable termination clearance	300mm minimum from gland plate	
30	Earth studs on both side of panel bottom	With M10 galvanized steel nut bolts	
31	Panel maximum dimensions in mm		
	8 - Way	Width - 1250, Depth - 600, Height – 1800	
	5- Way	Width - 900, Depth - 550, Height – 1850	
32	Holder for 230V Incandescent Lamp	Controlled through 2amp SPMCB	
33	5/15 amp 3pin socket power socket	Controlled through 16amp SPMCB with toggle switch	
34	Fuse base size as per	Size 2 for 400A	
	IS13703	Size 3 for 630A	
35	Current rating of fuse base at max. ambient temperature 48deg C Fuse base current carrying part	Incomers – 630 A Outgoings- 400 A	

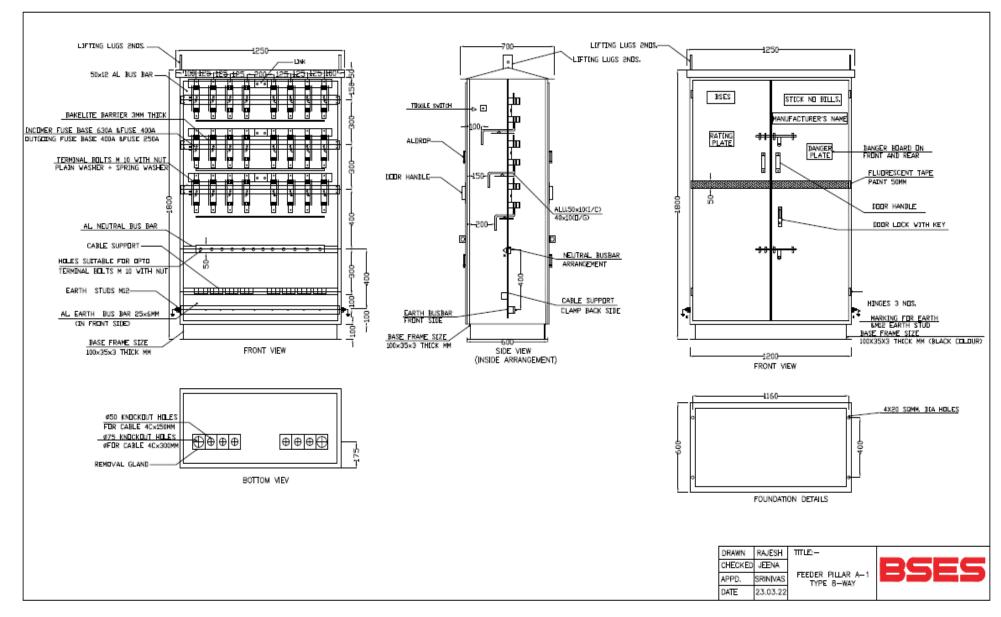


S. No	Particulars	BSES Requirement	Vendor Data
36	Fuse base current carrying part	Plated copper as per IS 191	
37	Fuse base material	DMC/ Porcelain  a) For DMC Fuse Base - GE, Siemens, L&T or ABB	
38	Make	b) For Porcelain Fuse Base – Sample to be approved by BSES  c) For Fuse Link- Siemens/L&T/Bussmann/ABB	
39	HRC fuse pullers - 1no/ Type of HRC Fuse	Suitable for 400A, 250A HRC fuse	
40	Clearance between live parts minimum 25mm	Phase to phase  Phase to earth	
41	Continuous rated operating voltage	433volt +/- 10%	
42	High voltage withstand capacity	2000V at 50Hz for 1 min.	
43	Insulation resistance Ph- Ph & Ph-earth	Minimum 100Mohm with 500v megger	
44	Labels & name plates	As per specification	
45	Painting	Power coated grade A polyester paint min. thickness 85 microns	
46	Shade-Dark Admiralty Grey	Shade – 632/538 as per IS:5	
47	Fluorescent paint strip on panel	50mm wide painted in the middle of panel	
48	Foundation Bolts	Required	

#### **Annexure-B**



#### **Annexure-C**





## **ANNEXURE -I**

## PRICE FORMAT

ITEM DESCRIPTION	QTY	UoM	EX- WORKS RATE PER KM	UNIT FREIGHT	GST	UNIT LANDED	TOTAL LANDED COST
FDR PILLAR,ELEC,A1;415V;IP 55	81	Nos					
FDR PILLAR,ELEC,A1;8WAY;NH FSD	55	Nos					



#### **ANNEXURE -II**

#### **BID FORM**

То

Head of Department Contracts & Material Deptt. BSES Rajdhani Power Ltd 1<sup>st</sup> Floor, C Block BSES Bhawan, Nehru Place New Delhi 110019

Sir,

- 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 as may be determined in accordance with the terms and conditions of the contract.
- 3 If our Bid is accepted, we undertake 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.
- 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.
- 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.
- 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	2022
Signature	In the capacity of
of	duly authorized to sign for and on behalf
(IN BLOCK CAPITALS)	



#### **ANNEXURE -III**

#### **ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT**

(To signed & stamped by the bidder along with bid)

BSES Rajdhani Power Ltd (BRPL) intends to use reverse auction through SAP-SRM tool as an integral part of entire tendering process. All bidders who are technocommercially qualified on the basis of tender requirements shall participate in the reverse auction.

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

- 1. In case of bidding through Internet medium, bidders are advised to ensure availability of all associated infrastructure as required to participate in the reverse auction event. Inability to bid due to telephone glitch, internet response issues, software & hardware hangs/failures, power failures or any other reason shall not be the responsibility of BRPL.
- 2. In case bidder fails to participate in the reverse auction event due to any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid submitted by them as a part of tender shall be considered as bidder's Final No Regret offer. Any off-line price bids received from a bidder in lieu of non-participation in the reverse auction event shall be rejected by BRPL.
- 3. The bidder is advised to understand the auto bid process t safeguard themselves against any possibility of non-participation in the reverse auction event.
- 4. The bidder shall be prepared with competitive price quotes during the day of reverse auction event.
- 5. The prices quoted by bidder in reverse auction event shall be on FOR Landed cost BRPL Store/site basis inclusive of all relevant taxes, duties, levies, transportation charges etc.
- 6. The prices submitted by the bidder during reverse auction event shall be binding on the bidder.
- 7. The bidder agrees to non-disclosure of trade information regarding bid details e.g. purchase, identity, bid process/technology, bid documentation etc.
- 8. BRPL will make every effort to make the bid process transparent. However award decision of BRPL will be final and binding on the bidder.
- 9. The prices submitted during reverse auction event shall be binding on the bidder.
- 10. No request for Time extension of the reverse auction event shall be considered by BRPL.



#### **ANNEXURE -IV**

#### 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").

WNOW ALL DEODLE by these presents that WE Inches of health at I Droppe Nome and
KNOW ALL PEOPLE by these presents that WE [name of bank] at [ <i>Branch Name and address</i> ], having our registered office at [ <i>address of the registered office of the</i>
bank] (herein after called the "Bank"), are bound unto BSES Rajdhani Power Ltd.,
with it's Corporate Office at BSES Bhawan Nehru Place, New Delhi -110019, (herein
after called —the "Purchaser") in the sum of
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

TH E CONDITIONS of this obligation are:

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 TWENTY DAYS(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(s)



#### **ANNEXURE -V**

## **COMMERCIAL TERMS AND CONDITIONS**

SI N	Item Description	AS PER BRSPL	BIDDER'S CONFIRMATIO
1	Validity	<b>120 days</b> from the date of offer.	
2	Price basis	a) <b>Firm,</b> FOR Delhi store basis. Prices shall be inclusive of all taxes & duties, freight up to Delhistores. b) Unloading at stores shall be in vendor's scope	
3	Payment terms	100% payment within <b>45 days</b> after receipt of material at stores	
4	Delivery schedule	As per SECTION - IV	
5	Defect Liability period	60 months after commissioning or66 months from the last date of dispatch, whichever is earlier	
6	Penalty for delay	1% per week of delay of undelivered units or part thereof subject to maximum of 10% of total PO value of undelivered units	
7	Performance Bank Guarantee	10% of total PO value valid for 24 months after commissioning or 30 months from the last date ofdispatch, whichever is earlier plus 3 months towards claim period	

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

FOR TECHNICAL QUERY:			
CONTACT PERSON & DESIGNATION	NAME	DESIGNATION	
E-MAIL	MOBILE NO	TELEPHONE NO	

FOR COMMERCIAL QUERY:			
CONTACT PERSON & DESIGNATION	NAME	DESIGNATION	
E-MAIL	MOBILE NO	TELEPHONE NO	



## ANNEXURE VI

## **NO DEVIATION SHEET**

SL NO	SL NO OF TECHNICAL SPECIFICATION	DEVIATIONS, IF ANY	

## **SIGNATURE & SEAL OF BIDDER**

**NAME OF BIDDER** 



## ANNEXURE-VII

## FORMAT FOR BACKUP OF SUPPLY & PERFORMANCE QUANTITY

S.No	PO No	PO Date	DO Otre	Supplied		Customer F.Y	
5.110	FO NO	FO Date	PO Qty	Qty.	Date	Customer	



# **CHECK LIST**

SI No	Item Description	YES/NO		
1	INDEX	YES/NO		
2	COVERING LETTER	YES/NO		
3	BID FORM (UNPRICED) DULY SIGNED (1 nos. Original +1 nos. Photo Copy)			
4	BILL OF MATERIAL (UNPRICED) (1 nos. Original +1 nos. Photo Copy)	YES/NO		
5	TECHNICAL BID (1 nos. Original +1 nos. Photo Copy)	YES/NO		
6	ACCEPTANCE TO COMMERCIAL TERMS AND CONDITIONS	YES/NO		
7	FINANCIAL BID (IN SEALED ENVELOPE - 1 ORIGINAL)	YES/NO		
8	EMD IN PRESCRIBED FORMAT	YES/NO		
9	DEMAND DRAFT OF RS 1180/- DRAWN IN FAVOUR OF	BSES RAJDHANI POWER LTD		
10	POWER OF ATTORNEY/AUTHORISATION LETTER FOR SIGNING THE BID			
11	ACCEPTANCE FORM FOR REVERSE AUCTION	YES/NO		
12	PLANT MANUFACTURING CAPACITY (CA CERTIFIED)	YES/NO		
13	ANNUAL TURNOVER (CA CERTIFIED)	YES/NO		
14	PERFORMANCE CERTIFICATE AS PER QR	YES/NO		
15	SUPPLIED QUANTITY AS PER PQR	YES/NO		
16	ISO Certification /Any other certification/Type test Report/BIS etc as per PQR	YES/NO		
17	Quality Assurance /Organization Chart	YES/NO		
18	Undertakings as per NIT	YES/NO		
19	Technical Deviation	YES/NO		
20	SUPPLIED/PERFORMANCE QTY AS PER QR ( IN ANNEXURE-VII) CA CERTIFIED	YES/NO		
Note	Note : The above document must be properly tagged with page nos.			