

**Tender Notification for**

**INHOUSE/ ONSITE REPAIRNG/SERVICING OF RMUs & ACBs of  
VARIOUS MAKE & RATINGS IN BYPL FY/20-21/RB/AS/024Dt. 5.11.2020**

**Due Date for Submission of Tender: 26.11.2020,15.30HRS**

**Date and Time of opening: 26.11.2020, 16.30 HRS**

**Pre bid date :19.11.2020 at 12.30HRS**

**BSES YAMUNA POWER LIMITED,**

**Shakti Kiran Building, Karkardooma, New Delhi-110032**

**Corporate Identification Number: U40109DL2001PLC111525**

**Telephone Number : +91 11 3999 7111**

**Fax Number: +91 11 3999 9765**

**Website: [www.bsesdelhi.com](http://www.bsesdelhi.com)**

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REQUEST FOR QUOTATION

1.1 GENERAL

BSES Yamuna Power Limited invites sealed tenders in 2 envelopes for  
“INHOUSE/ ONSITE REPAIRING OF RMUs & ACBs of VARIOUS MAKE & RATINGS  
IN BYPL”

1.01 The bidder must qualify the requirements as specified in clause 1.3 stated below. The sealed envelopes shall be duly superscribed as-

“INHOUSE/ ONSITE REPAIRING OF RMUs & ACBs of VARIOUS MAKE & RATINGS  
IN BYPL”

“NIT NO CMC/BY/20-21/RB/AS/024 Dt. 26.11.2020”

1.02 BYPL invites sealed tenders from eligible bidders for the above-mentioned work (clause 1.01).

Estimated cost of work	: Rs 2.4cr
Earnest money Deposit	: Rs 4 lac
Cost of Tender form (Non- Refundable)	: Rs.1180/-
Duration of the Work	: 2 Year (from date of issue of order)
Tender documents on sale	: 05/11/2020 (working days)
Date & time of Submission of Tender	: 26/11/2020 till 1500 HRS
Date & time of opening of Tender (Opening of technical bid)	: 1630HRS on 26/11/2020

**Date & Time of Prebid Meeting : 19/11/2020 at 12.30 pm on Zoom (for detail please refer prebid meeting Cl. No. 1.3(h))**

The tender document can be obtained from address given below against submission of non-refundable demand draft of Rs.1180/- drawn in favour of BSES Yamuna Power Ltd, payable at Delhi:

Head of Department  
Contracts & Material Dept.  
Shakti Kiran Building , karkardooma ,  
BSES Yamuna Power Limited  
New Delhi-32  
Telephone no.011- 39997111

The tender papers will be issued on all working days up to the date mentioned in clause 1.01. The tender documents & detail terms and conditions can also be downloaded from the website [www.bsesdelhi.com](http://www.bsesdelhi.com). In case tender papers are

downloaded from the above website, then the bidder has to enclose a separate demand draft covering the cost of bid documents.

## 1.2 POINTS TO BE NOTED

1.2.1 Works envisaged under this contract are required to be executed in all respects up to the period of completion mentioned above.

1.2.2 Only those agencies, who fulfill the qualifying criteria as mentioned in clause 1.3 should submit the tender documents.

1.2.3 Tender document consists of the following:

- a. Request for quotation/ Notice Inviting Tender
- b. Instructions to bidders
- c. Terms & conditions
- d. Bill of Quantities/ Price Format / Bid form/BG and EMD Format

1.2.4 The Contract shall be governed by the documents listed in para 1.2.3 above.

1.2.5 BSES YamunaPower Ltd 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 at the time of placing purchase/ work orders. Tender will be summarily rejected if:

- (i) If Earnest Money Deposit (EMD) of requisite amount is not Deposited in shape of Bank Draft/Pay Order/FDR/BG drawn in favour of BSES YamunaPower Ltd, payable at Delhi.
- (ii) If Tender is received after due date and time.

## 1.3 Qualifying Criteria:-

The prospective bidder must qualify all of the following requirements to be eligible to participate in the bidding:

- a) The bidder should have of carrying out repairing of RMUs & ACBs of all makes (as specified in Section V) in the past 3 years inelectrical Utilities / SEB's/ Discoms/ other govt. organizations.
- b) The bidder should enclose performance certificates in support of relevant experience. Credentials/ work experience as a sub-contractor will not be acceptable.

- c) Bidder must provide proof of having average annual turn over of Rs. 2 Cr. (2 Crore) or above during the last three financial years. ( FY 17-18, 18-19&19-20)
- d) Bidder must provide proof of having solvency of an amount equal to Rs. 50 Lacs from any nationalized/ scheduled commercial bank.
- e) Bidder should have valid Registration No. GSTIN
- f) Bidder should have PAN No & should fulfill all statutory compliances like PF, ESI registration
- g) Bidder should have a valid Electrical License issuing by Delhi Govt. for doing the electrical works in Delhi region.

The bidder shall submit all necessary documentary evidence to establish that the Bidder meets the above qualifying requirements.

Please Note:

- a) Firms who are debarred/ blacklisted in other utilities in India will not be considered.
- b) Company reserves the right to carry out technical capability/ infrastructure assessment of the Bidders by factory/office inspection or by any other means and company's decision shall be final in this regard.
- c) No joint ventures/ consortiums are allowed

Also, the Bidder shall furnish the following commercial & technical information along with the tender:

- a) Latest balance sheet
- b) Detail of Banker & Cash Credit limit
- c) Details of constitution of the company (Proprietary/ Limited/ Pvt. Ltd. Along with details)
- d) Memorandum & Articles of Association of the Company
- e) Organization Chart of the company
- f) Experience details with credentials
- g) Turnover certificate issued by C.A for the last three Financial Years.

### **1.3 (h) Pre-Bid Meeting :**

**Topic : Schedule for Pre meeting of NIT no.- CMC/BY/20-21/RB/AS/023 on below date**

**Time: October -19/11/2020, 11AM**

**Join Zoom Meeting: -<https://zoom.us/j/8672899211>**

**Meeting ID: 8672899211**

**Password: 654321**

All the queries related to this tender must reach to C&M BYPL at least upto, 2pm, 19<sup>th</sup> November .

All the queries shall be replied in the prebid, in case any change is required in the tender document the same shall be affected in the form of corrigendum to this tender

#### 1.4 Bidding and Award Process:-

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

##### 1.4.1 BID SUBMISSION:

The bidders are required to submit the bid in 2(two) parts and submit in original + one copy to the following address

Head of Department  
Contracts & Material Dept.  
Shakti Kiran Building , karkardooma ,  
BSES Yamuna Power Limited  
New Delhi-32  
Telephone no.011- 39997111

PART A : TECHNICAL BID comprising of following:

- EMD of requisite amount
- Non-refundable separate demand draft for Rs. 11800/- In case the forms are downloaded from the website
- Documentary evidence in support of qualifying criteria
- Technical Literature if any.
- Any other relevant document
- Acceptance to Commercial Terms and Conditions viz Delivery schedule/period ,Payment terms ,BG etc
- Acceptance to Technical Specifications if any

The technical bid shall also contain the tender Document with all pages signed & stamped with bidder's seal

PART B: FINANCIAL BID comprising of Prices strictly in the Format enclosed in SECTION VI

#### TIME SCHEDULE

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

S. No.	Steps	Comprising of	Due date
1	Pre bid meeting for Technical & commercial Queries	All Queries related to RFQ	18.11.2020 at 1500 PM
2	Submission of PART A Technical and Commercial Bid	EMD of requisite amount Non-refundable demand draft for Rs. 1180/- In case the forms are downloaded from the website Documentary evidence in support of qualifying criteria Any other relevant document Acceptance to Commercial Terms and Conditions , Payment terms, BG etc.	26.11.2020 at 1530HRS
3	PART B Financial Bid	Price strictly in the Format enclosed (Section V) indicating Break up regarding basic price, taxes & duties etc.	26.11.2020 at 1630

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 envelope which should be super scribed with —“Tender Notice No.& Due date of opening“. The same shall be submitted before the due date & time specified.

Part - A: Technical Bid should not contain any cost information whatsoever and shall be submitted within the due date. After technical evaluation, the list of qualified bidders will be posted immediately on BSES website.

PART B: This envelope will be opened after technical evaluation and only of the qualified bidders.

#### FINANCIAL BID EVALUATION THROUGH REVERSE AUCTION:

Reverse auction shall be conducted for finalization of contract and the details of the price bid shall not be shared with bidders.

The qualified bidders will participate in reverse auction through SAP-SRM tool. The reverse auction process shall be governed by the terms and conditions enclosed as Annexure-A in this tender document. Training/details shall be provided to bidders before participation in auction.

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

#### 1.4.2 Award Decision

- a) Company intends to award the business on a lowest bid basis, so bidders are encouraged to submit the bid competitively. The decision to place order/LOI solely depends on Company on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Company may deem relevant.
- b) The Company 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.
- c) In case any contractor is found unsatisfactory during the execution process, the award will be cancelled and BYPL reserves the right to award other contractors who are found fit.



### 1.4.3 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 violate the market place rules or engage in behavior that disrupts the fair execution of the market place 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 market place.
- Breach of the terms of the published in Request for Quotation/NIT.

### 1.4.4 Confidentiality

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

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

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

### 1.5 Contact Information

Technical clarification, if any, as regards this RFQ shall be sought in writing and sent by post/courier to following address

	<b>Technical</b>	<b>Commercial</b>
<b>Contact Person</b>	Head Switchgear workshop & Protection Mr Pradeep Lohani pradeep.lohani@relianceada.com Copy to : Head (C&M)	Head (C&M): Mr Rakesh Bansal rakesh.bansal@relianceada.com
<b>Address</b>	Head Switchgear workshop & Protection BSES Yamuna Power Limited III Floor, "A" Block, Shakti Kiran Building, Karkardooma New Delhi-110032	C&M Dept BSES Yamuna Power Limited III Floor, "A" Block, Shakti Kiran Building, Karkardooma New Delhi-110032

## SECTION - II: INSTRUCTION TO BIDDERS

### 1. GENERAL

BSES YamunaPower Ltd, hereinafter referred to as “The Company“ is desirous of awarding work for “INHOUSE/ ONSITE REPAIRNG OF RMUs & ACBs of VARIOUS MAKE and RATINGS IN BYPL”

- 1.1 All the Bids shall be prepared and submitted in accordance with these Instructions.
- 1.2 Bidder shall bear all costs associated with the preparation and delivery of its Bid, and the Company will in no case shall be responsible or liable for these costs.
- 1.3 The Bid should be submitted by the Bidder in whose name the bid document has been issued and under no circumstances it shall be transferred /sold to the other party.
- 1.4 The Company 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 Company, the data in support of RFQ requirement is incomplete.
- 1.5 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 Company’s decision in regard to the responsiveness and rejection of bids shall be final and binding without any obligation, financial or otherwise, on the Company.

### 2.0 DISCLAIMER

- 2.01 This Document includes statements, which reflect various assumptions, which may or may not be correct. Each Bidder/Bidding Consortium should conduct its own estimation and analysis and should check the accuracy, reliability and completeness of the information in this Document and obtain independent advice from appropriate sources in their own interest.
- 2.02 Neither Company 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 Company or its employees, or otherwise a rising in anyway from the selection process for the work.

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

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

### 3 COST OF BIDDING

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

#### B. BIDDING DOCUMENTS

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

Request for Quotation (RFQ)	- Section - I
Instructions to Bidders (ITB)	- Section - II
Commercial Terms & Conditions	- Section -III
Scope of Work	- Section-IV
List of T&P/ Machinery/ petty Items	- Section-V
Price Format	- Section VI

4.01 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.

#### 5.0 AMENDMENT OF BIDDING DOCUMENTS

5.01 At any time prior to the deadline for submission of Bids, the Company 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.

5.02 The Amendment shall be part of the Bidding Documents, pursuant to Clause 5.01, and it will be notified in writing by Fax/e-mail to all the Bidders who have received the Bidding Documents and confirmed their participation to Bid, and will be binding on them.

5.03 In order to afford prospective Bidders reasonable time in which to take the Amendment into account in preparing their Bids, the Company may, at its discretion, extend the deadline for the submission of Bids.

## C PREPARATION OF BIDS

### 6.0 LANGUAGE OF BID

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and the Company, 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.

### 7.0 DOCUMENTS COMPRISING THE BID

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

- (a) Bid Form ,Price & other Schedules (STRICTLY AS PER FORMAT) and Technical Data Sheets completed in accordance with Technical Specification.
- (b) All the Bids must be accompanied with the required EMD as mentioned in the Section-I against each tender.

### 8.0 BID FORM

8.01 The Bidder shall submit Original ‘ Bid Form’ and the appropriate Price Schedules and technical specifications enclosed with the Bidding Documents.

### 8.02 EMD

Pursuant to Clause 7.0(b) above, the bidder shall furnish, as part of its bid, a EMD of requisite amount as already specified in the Section-I. The EMD is required to protect the Company against the risk of Bidder’s conduct which would warrant forfeiture. The EMD shall be denominated in any of the following form:

- (a) Demand Draft/Pay Order drawn in favour of BSES YamunaPower Ltd, payable at Delhi.
- (b) BG/ Fixed Deposit Receipts (FDR) from a nationalized/ scheduled bank in favour of BSES YamunaPower Limited.

The EMD shall be valid for 3 months from the last date of receipt of tenders. If however the tender is not finalized within 3 months, the bidders shall be required to suitably extend the EMD

Earnest money given by all the bidders except the lower bidder shall be refunded within 4 (four) weeks from the date of opening of price bid. The amount of EMD by the lowest bidder shall be adjustable in the security bank guarantee

The EMD may be forfeited in case of:

- (a) if the Bidder withdraws its bid during the period of bid validity specified by the Bidder in the Bid Form or
- (b) in the case of a successful Bidder, if the Bidder does not
  - (i) accept the Purchase Order, or
  - (ii) furnish the required performance security BG.

## 9.0 BID PRICES

- 9.01 Bidders shall quote for the entire Scope of work with prices for individual items. The tenderer is required, at his expense, to obtain all the information he may require to enable him to submit his tender including necessary visits to the site to ascertain the local conditions, procurement of necessary materials, labour, etc., requirements of the local/government/public authorities in such matters.

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

## 10.0 BID CURRENCIES

Prices shall be quoted in Indian Rupees Only.

## 11.0 PERIOD OF VALIDITY OF BIDS

- 11.01 Bids shall remain valid & open for acceptance for a period of 90 days from the date of opening of the Bid.
- 11.02 Notwithstanding Clause 11.01 above, the Company 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 Fax/post/courier

## 12.0 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.

## 13.0 FORMAT AND SIGNING OF BID

13.01 The original Bid Form and accompanying documents(as specified in Clause 8.0),clearly marked "Original Bid", must be received by the Company at the date, time and place specified pursuant to Clauses 14.0 and 15.0.

13.02 The original 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.

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

## D. SUBMISSION OF BIDS

### 14.0 SEALING AND MARKING OF BIDS

14.01 Bid submission: One original (hard copies) of all the Bid Documents shall be sealed and submitted to the Company before the closing time for submission of the bid.

14.02 The Technical Documents and the EMD shall be enclosed in a sealed envelope and the said envelope shall be superscribed with — Technical Bid & Commercial Terms & Conditions “. The price bid shall be inside another sealed envelope with superscribed —“Financial Bid “. Both these envelopes shall be sealed inside another big envelope. All the envelopes should bear the Name and Address of the Bidder and marking for the Original. The envelopes should be superscribed with —“Tender Notice No.& Due date of opening“.

14.03 The Bidder has the option of sending the Bids in person. Bids submitted by Email/Telex/Telegram /Fax will be rejected. No request from any Bidder to the Company to collect the proposals from Courier/Airlines/Cargo Agents etc shall be entertained by the Company.

## 15.0 DEADLINE FOR SUBMISSION OF BIDS

15.01 The original Bid must be timely received by the Company at the address specified in Section-I

15.02 The Company may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with Clause 5.0, in which case all rights and obligations of the Company and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended

## 16.0 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.

## 17.0 LATE BIDS

Any Bid received by the Company after the deadline for submission of Bids prescribed by the Company, pursuant to Clause 15.0, will be declared "Late" and rejected and returned unopened to the Bidder.

## 18.0 MODIFICATIONS AND WITHDRAWAL OF BIDS

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

## E. EVALUATION OF BID

### 19.0 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 Company's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

### 20.0 CLARIFICATION OF BIDS

To assist in the examination, evaluation and comparison of Bids, the Company 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.

## 21.0 PRELIMINARY EXAMINATION OF BIDS / RESPONSIVENESS

- 21.01 Company 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.
- 21.02 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.
- 21.03 Prior to the detailed evaluation, Company 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.
- 21.04 Bid determined as not substantially responsive will be rejected by the Company and/or the Company and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

## 22.0 EVALUATION AND COMPARISON OF BIDS

- 22.01 The evaluation of Bids shall be done based on the delivered cost competitiveness basis.
- 22.02 The evaluation of the Bids shall be a stage-wise procedure. The following stages are identified for evaluation purposes: In the first stage, the Bids would be subjected to a responsiveness check. The Technical Proposals and the Conditional ties of the Bidders would be evaluated.

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

- 22.03 The Company's evaluation of a Bid will take into account, in addition to the Bid price, the following factors, in the manner and to the extent indicated in this Clause:
- (a) Work completion schedule
  - (b) Conformance to Qualifying Criteria
  - (c) Deviations from Bidding Documents



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

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

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

## F. AWARD OF CONTRACT

### 23.0 CONTACTING THE COMPANY

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

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

### 23.0 THE COMPANY'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

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

### 24.0 AWARD OF CONTRACT

The Company 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. Company reserves the right to award order other bidders in the tender, provided it is required for progress of project & provided the bidders agree to come to the lowest rate.

### 25.0 THE COMPANY'S RIGHT TO VARY QUANTITIES

The Company 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.

## 26.0 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 Company.

## 27.0 CORRUPT OR FRAUDULENT PRACTICES

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

(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 award process or the execution of a contract to the detriment of the Company, 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 Company 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.

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

### SECTION - III: TERMS AND CONDITIONS

BSES YamunaPower Limited is a COMPANY (having license) in the business of distribution and retail supply of Electricity in the areas of its Distribution Network. Total 14 divisions are covered under BYPL

The COMPANY is desirous of engaging a third party for carrying out repairing of RMUs & ACB of various makes & ratings in BYPL. Detailed scope of work is as per SECTION-IV

#### 1.0 DEFINITIONS & INTERPRETATION:

The following terms & expressions as used in the CONTRACT shall have the meaning defined and interpreted hereunder:

1.1 COMPANY: The terms "Company" shall mean BSES YamunaPower Ltd. having its office at Shaktikiran Building , Karkardooma, New Delhi-110032 and shall included its authorized representatives, agents, successors and assigns.

1.2 CONTRACTOR: shall mean the successful renderer / vendor to whom the contract will be awarded and shall include its authorized representative, agents, successors, and assigns.

1.3 CONTRACT SPECIFICATION: The terms "CONTRACT Specification" shall mean the Technical specification of the work as agreed by contractor and description of work as detailed and all such particulars mentioned directly/referred to or implied as such in the contract.

1.4 SITE: The terms "Site" shall mean the working location in BYPL area.

1.5 ENGINEER IN CHARGE: The terms #Engineer In-Charge & Inspector# shall mean the Company's nominated representative for the purpose of carrying out the Inspection for the works being executed by the Contractor in relation to this work Order. For this order Engineer In-Charge shall be Head (Switchgear Repair Workshop), BYPL.

1.6 Good Industry Practice: means the exercise of that degree of skill, diligence and prudence which is expected from a skilled, experienced and recognized contractor engaged in the same type of undertaking similar to the one undertaken by the Contractor and acting generally in accordance with the prevailing laws, rules, regulations, codes and industry standards.

1.7 Effective Date: means the date when Contractor through its authorized representative places its signature on the duplicate copy of this contract.

1.8 Rate: The unit rates for the work to be carried out at site shall be as per finalized unit rates through tender and payable by the Company to the Contractor for the due, complete and proper performance of the jobs covered under this contract.

## 2.0 EXAMINATION OF SITE AND LOCAL CONDITIONS:

The CONTRACTOR has to visit the site of the work under the order and ascertain thereof all site conditions and information pertaining to his work. The COMPANY shall not accept any claim whatsoever arising out of the difficult site/terrain/local conditions, if any.

## 3.0 LANGUAGE AND MEASUREMENT:

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

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

## 4.0 SCOPE OF WORK:

The scope of work to be carried out by THE CONTRACTOR shall be as under:

- a) Onsite Repairing of RMU/ ACBs of various makes. For onsite repairing the vendor has to provide 1 teams each for RMU and ACB repair separately per month
- b) In-house repairing of ACBs /RMU of various ratings at Switchgear repairing workshop which is located at Patparganj .For in house repairing of ACB /RMUs 4 teams each for ACB repairs & RMU repair per month

For carrying out the above work the scope shall be per SECTION-IV of this tender document.

The scope of work to be carried out by you shall be repairing of LT ACB 's of various ratings(i.e. 2000 A, 1250 A, 800 A & 400 A or any Higher rating ) & Makes at makes our workshop or at site .

Repairing of RMU/ ACB shall be carried out as per direction of engineer incharge. Engineer Incharge shall provide the details of RMU/ACB to be taken up for repairing & servicing time to time.

Engineer in charge shall provide the contractor the details of RMU/ ACBs to be taken up

for repairing. Contractor has to maintain all documents & records as per format provided by Engineer Incharge. Contractor has to complete & certify all the testings of equipments as per IEC standards & will carry out PDI inspection before handing over to BSES

All the manpower, Instruments (except primary injection & secondary injection kit), tool and tackles & all the spares required to repair ACB (except electronic protection relay) are included in contractor's scope of work. All Major spares & protection relay to repair RMU will be provided by the BSES, All Petty items covered under contractor's scope shall be as per Section-V

#### 5.0 CONTRACT PRICE:

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

**(Except any revision in minimum wages by Govt. of NCT during the contract on actual basis).**

#### 6.0 TAXES & DUTIES:

The prices are inclusive of all taxes and duties including labour cess. However, GST at actual shall be paid extra on submission of GISTN Registration and self declaration on your letter head stating that you have deposited/ or will deposit the Tax as per the applicable service tax laws.

Income tax/ VAT will be deducted from your bills as Tax Deduction at Source (TDS).

Any statutory variations i.e. increase/decrease in Taxes / Duties introduced by central Govt. / State Govt. of shall be reimbursed/recovered to/from Contractor against documentary evidence and proof.

#### 7.0 TERMS OF PAYMENT:

100% payment shall be made to you within 30 days on submission of monthly bills for repaired RMU/ ACB duly certified by Engineer-in-charge.

#### 8.0 CONTRACT PERFORMANCE SECURITY BANK GUARANTEE:

8.1 CONTRACTOR shall furnish the Security Performance Bank Guarantee in the prescribed format (Appendix I) within 1 month from the date of issue of Order for due performance of the provisions of Work Order.

8.2 The Security Performance Bank Guarantee shall be of 5% of the total value of order and shall be valid till end warranty period, plus three (3) months towards claim period.

8.3 The Security Performance Bank Guarantee shall be issued from any nationalized/ scheduled bank as per company format.

8.4 The Company shall reserve the right to invoke the bank guarantee unconditionally and without recourse to the Contractor, if there is failure to perform any part of the Contract for whatsoever reason. This clause is pertaining to performance of contractual obligations and the decision of Company shall be final in this regard.

8.5 In the event, in Company sole judgment, the Contractor has fulfilled all its obligations under this Contract, Company shall release the security performance bank guarantee without interest, within seven (7) days from the last date up to which the performance bank guarantee is to be kept valid or if it is assessed by the Company that Contractor has not fulfilled its obligation then the performance bank guarantee shall be extended by the Contractor till that period as requested by the Company.

#### 8.6 Guarantee:

The contractor shall guarantee for the repairing work carried out by them on the individual RMU/ ACB for a period of one year from the date of completion of repair works. If same fault arises in the RMU/ ACB within this period, the contractor shall repair the same free of cost.

In respect of any warranty work performed by the Contractor, the period during which a claim may be made for such warranty work shall be extended by an additional period of twelve (12) months from the completion of such portion of warranty work.

8.7 Contractor shall ensure that the services are carried out in accordance with the terms and conditions of this service contract. If the services are not carried out to the satisfaction of BYPL, whose decision shall be final & binding, the bank guarantee shall be en-cashed and in addition the contractor shall be liable to pay and / or reimburse to the company a sum equal to Rs 1 lakh & further the company reserves the right to terminate the service contract & with immediate effect the contractor shall not be liable for any compensation under the service contract.

#### 9. PENALTY:

For Onsite repairing: If the contractor fails to provide manpower as per requirement, he shall be liable to pay penalty.

For non providing of any resources i.e. manpower / vehicle, an amount of Rs. 1500/- per day per manpower shall be deducted

User group/Engineer In charge should specifically mention the amount of penalty levied on the bill of contractor for this job.

For Inhouse repairing: If the contractor fails to deliver the desired output per month, subject to availability of faulty RMU / ACB , he shall be liable to pay penalty by an amount equal to repairing charges per ACB / RMU or minimum Rs 1000/- .

The penalty shall be applicable from the third month of the contract from the date of award .

Engineer in-charge shall be the certifying authority to deduct the penalties.

#### 10. SCRAP RECONCILIATION/ DISPOSAL Of HAZARDOUS MATERIAL:

Scraping of ACB/RMU, cannibalizing it spares and transportation of damage/non repairable ACBs/RMUs to scrap store form workshop is also in the scope of vendor. The vendor shall be required to return the scrap material as per the directions of Engineer in charge.

Also disposal of Hazardous material for repairing at workshop shall be in the contractor's scope

#### 11.0 STATUTORY PERMISSION/ APPROVALS:

The CONTRACTOR shall take all steps as may be necessary to comply with the various applicable laws/rules including the provisions of contract labour (Regulation & Abolition Act) 1970 as amended, Minimum wages Act, 1948, Workman Compensation Act, ESI Act, PF Act, Bonus Act and all other applicable laws and rules framed there under including any statutory approval required from the Central/State Governments, Ministry of Labour and produce the documents whenever necessary. Broadly, the compliance shall be as detailed in ANNEXURE-A enclosed.

#### 12.0 WORKMEN COMPENSATION:

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

The CONTRACTOR shall keep the COMPANY indemnified at all times, against all claims of compensation under the provisions of Workmen Compensation Act 1923 as amended from time to time or any compensation payable under any other law for the time being involving workmen engaged by the CONTRACTOR in carrying out the job involved and against costs and expenses, if any, incurred by the COMPANY in connection therewith and without prejudice to make any recovery.

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

### 13.0 THIRD PARTY INSURANCE:

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

### 14.0 REPRESENTATION, WARRANTIES AND GUARANTEES:

The Contractor hereby represents warrants and guarantees that:

- i) It is a legally recognized entity under the laws of India;
- ii) The Contract contains valid and binding obligations and is enforceable in accordance with the terms hereof;
- iii) It has studied the technical feasibility, Site conditions and other prevailing conditions and all other operational details and based on these studies carried out, has agreed to provide to the Company the services as contemplated in this Contract;
- (iv) It has appraised itself of all applicable rules and regulations, and shall at all times comply with such rules and regulations;
- v) It shall procure vehicles and manpower suitable for the purposes of this Contract to render services as contemplated in this Contract;
- vi) The Services would be conducted in a safe and efficient manner at the Site and at all times in compliance with Good Industry Practices and requirements of the Company;



vii) It shall duly pay the duties, taxes and levies as are set out in this Contract, which are to be paid by the Contractor;

There is no action, suit or proceeding, at law or in equity, or to the best of its knowledge, any official investigation before or by any governmental authority, arbitration tribunal or other body pending or, to the best of its knowledge, threatened against or affecting it or any of its property, rights or assets, which could reasonably be expected to result in a material adverse effect on its ability to perform its obligations under this Contract or on the validity or enforceability of this Contract;

#### 15.0 TECHNICAL INFORMATION/DATA:

The COMPANY and the CONTRACTOR, to the extent of their respective rights permitting to do so, shall exchange such technical information and data as is reasonably required by each party to perform its obligations and responsibilities. The COMPANY and the CONTRACTOR will keep each other in confidence and to use the same degree of care as it uses with respect to its own proprietary data to prevent its disclosure to third parties of all technical and confidential information. The technical information, drawings, records and other document shall not be copied, transferred, traced or divulged and / or disclosed to third party in full / part not misused in any other form. These technical information, drawing etc. shall be returned to the COMPANY with all approved copies and duplicates. In the event of any breach, the CONTRACTOR shall indemnify the COMPANY against any loss, cost of damages or claim by any party in respect of such breach.

#### 16.0 CONFIDENTIAL INFORMATION

That any information concerning the COMPANY which is designated in writing as proprietary and confidential, the VENDER shall not publish or otherwise disclose it to others. The VENDER shall, at all times use their best Endeavour to keep confidential all information. Accordingly, the VENDER shall not disclose the same to any other person, provided that the provisions of this section shall not apply to information which: was furnished prior to the signing of Agreement / issuance of this tender document, without restriction ;

is or becomes knowledge available within the public domain (other than by breach of the foregoing obligation of confidentiality) ;

is received by either the COMPANY or the VENDER from a third party without restriction is independently developed by either the COMPANY or the VENDER provided that (i) nothing herein shall limit the right of the COMPANY to provide any information regarding the VENDER or any other person who has executed a

confidentiality undertaking to the COMPANY covering the VENDER confidential information that is substantially similar to the provision of this section or otherwise with the VENDER's consent; and (ii) the VENDER may provide to their employee any information necessary to carry out the services.

#### 17.0 ASSIGNMENT:

Notwithstanding anything contained here to the contrary, the CONTRACTOR shall not assign or sublet or transfer all or any of its rights or obligations under this Agreement to any other party without the prior written consent of the COMPANY. The CONTRACTOR shall perform its obligations in a manner consistent with the job requirements to the satisfaction of the COMPANY.

#### 18.0 COMPLIANCE OF APPLICABLE LABOUR LAWS INCLUDING SAFETY RULES AND REGULATIONS:

The CONTRACTOR confirms and undertakes to comply with all applicable Labour Laws/Model Standing Orders and other statutory provisions as applicable in discharging its functions and duties under these presents and under specific Work Orders and fully observe applicable safety rules and regulations. The CONTRACTOR will provide protective safety equipments to its employees / workmen deployed. It will be also obligatory on the

CONTRACTOR to comply with all the statutory requirements related to work permit, periodic testing of various tools and tackles, including lifting tools, HT / LT Training & Testing kits etc. The CONTRACTOR shall ensure adequate safety precautions at site as required under the law of the land and shall be entirely responsible for the complete safety of its workmen as well as other workers, public, equipment, structures etc. at site.

#### 19.0 FORCE MAJEURE:

##### 19.1 General:

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

Such event or circumstance, despite the exercise of reasonable diligence, could not have been prevented, avoided or reasonably foreseen by such Party;

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. 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.

Such event is not the direct or indirect result of the failure of such Party to perform any of its obligations under this Contract; and

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 Article 14.1

#### 19.2 Specific Events of Force Majeure:

Subject to the provisions of Article 14.1, Events of Force Majeure shall include only the following to the extent that they or their consequences satisfy the above requirements:

The following events and circumstances:

Effect of any natural element or other acts of God, including but not limited to storm, flood, earthquake, lightning, cyclone, landslides or other natural disasters, and Explosions or fires Public disorder, insurrection, rebellion, sabotage, riots or violent demonstrations of a local character; Declaration of the Site as war zone. Any order, regulation, directive, requirement from any Governmental, legislative, executive or judicial authority.

#### 19.3 Notice of Events of Force Majeure:

If a force majeure event prevents a party from performing any obligations under the Contract in part or in full, that party shall :

Immediately notify the other party in writing of the force majeure events within 2 working days of the occurrence of the force majeure event

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 Use all reasonable efforts to resume full performance of the obligation as soon as practicable

Keep the other party informed of all such efforts to resume full performance of the obligation on a regular basis

Provide prompt notice of the resumption of full performance or obligation to the other party.

#### 19.4 Mitigation of events of force majeure:

The Contractor shall:

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

#### 19.5 Burden of proof:

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

#### 19.6 Terminations for certain events of force majeure:

If any obligation of any Party under the Contract is or is reasonably expected to be delayed or prevented by a Force Majeure event for a continuous period of more than 1 (one) month during the Term of the Contract the Contract shall be terminated at the discretion of the Company and neither Party shall be liable to the other for any consequences arising on account of such termination.

#### 20.0 RISK & COST :

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

## 21.0 Environmental, Health & Safety Plan:

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

Contractors must comply with these requirements:

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

All contractor's staff are accountable for the following:

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

## 22. SAFETY CODE:

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

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

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

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

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

#### 25.0 INSURANCE POLICY FOR LIFE COVER:

Before commencing the execution of the work the CONTRACTOR shall take Life insurance policy for the staff engaged by him for this work to insure against any loss of life which may occur during the contract for the work of the COMPANY. The policy shall have coverage of Rs. 10 Lacs (Table C- Death + Permanent Total Disability + Partial permanent Disability due to external accidents). The premium amount for such life cover policy shall be in contractor scope. The policy document shall be submitted before commencement of the work by the contractor.

26.0 ARBITRATION: To the best of their ability, the parties hereto shall endeavor to resolve amicably between themselves all disputes arising in connection with the proposed Agreement. If the same remain unresolved, within fifteen (15) days of the matter being raised by either party, either party may refer the dispute for settlement by arbitration. The arbitration to be undertaken by a sole arbitrator to be appointed by the company. The decision of the arbitrator is final and binding upon both the parties. The arbitration proceeding shall be conducted in accordance with the provisions of the Indian Arbitration & Conciliation Act, 1996 and the venue of such arbitration shall be New Delhi only.

## 27.0 INDEMNIFICATION:

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

a) any breach non-observance or non-performance by contractor or its employees or agents of any of the provisions of this Work Order.

b) any act or omission of contractor or its employees or agents.

c) any negligence or breach of duty on the part of contractor, its employees or agents including any wrongful use by it or them of any property or goods belonging to or by COMPANY.

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

## 28.0 GOVERNING LAWS AND JURISDICTION:

This proposed Agreement shall be construed in accordance with and governed by Laws of India. The courts of Delhi shall have the exclusive jurisdiction in all matters arising under this Agreement.

## 29.0 NOTICE:

All notices required or provided for in this Agreement shall be in writing and shall be deemed to have been duly and properly served upon the parties hereto if delivered against acknowledgement or by registered mail with acknowledgement due at the address mentioned herein:

Head (C&M)

3<sup>rd</sup> Floor , “ A ” BLOCK , Shakti Kiran Building,

Karkardooma , New delhi

BSES YamunaPower Ltd.

### 30.0 PERFORMANCE:

The performance of the CONTRACTOR shall be reviewed by the company for the work done by the CONTRACTOR. If the performance of CONTRACTOR not found to be satisfactory, the contract shall be terminated and communicated to all concerned. The performance of the contractor should be reviewed every quarter & a presentation should be given by the vendor in front of the Company management team .

### 31.0 ENTIRE AGREEMENT:

This Agreement including all Schedules attached hereto contains the complete understanding between the COMPANY and the CONTRACTOR with respect to the matters contained herein and supersedes all other agreements, whether written or oral with respect to the matters contained herein.

### 32.0 AMENDMENT:

Any modification, amendment or other change to this Agreement shall be affected only by a written instrument signed by the authorized representatives of both the COMPANY and the CONTRACTOR.

### 33.0 EFFECTIVE DATE AND VALIDITY:

The award of work shall become effective for all purposes from the releasing the LOI / contract and shall remain valid for a period of 2 year. However the contract shall be reviewed after one year

After expiry of the validity period, it may be extended/renewed/replaced for such further period on such terms and conditions as may be mutually agreed to between the COMPANY and the CONTRACTOR. If no agreement is reached between the parties before the expiry of this Agreement, the said Agreement shall automatically lapse after expiry of the contract.i.e. 2 years

### 34.0 TERMINATION:

During the course of the execution, if at any time the COMPANY observe and forms an opinion that the work under the order is not being performed satisfactory and the performance of the VENDER not found satisfactory, the COMPANY reserves its right to cancel/ terminate this Agreement giving one monthnotice without assigning any reason and the COMPANY will recover all damages including losses occurred due to loss of time from the VENDER. On receipt of such notice the VENDER shall immediately stop all activities related to the work terminated. This is without prejudice to other rights under the terms of contract. The VENDER shall hand over the COMPANY all drawing/documents prepared for this contract up to the date of cancellation of order.

### 35.0 VENDOR CODE OF CONDUCT :



Contractor confirms to have gone through the Policy of BYPL on legal and ethical code required to be followed by contractor encapsulated in the “Vendor Code of Conduct” displayed on the official website of BYPL ([www.bsesdelhi.com](http://www.bsesdelhi.com)) also, which shall be treated as a part of the contract.

Contractor undertakes that he shall adhere to the Vendor code of Conduct and also agrees that any violation of the Vendor Code of Conduct shall be treated as breach of the contract.

In event of any such breach, irrespective of whether it causes any loss/damage, company (BYPL) shall have the right to recover loss/damage from Contractor.

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

### 36.0 ACCEPTANCE:

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

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

#### OCCUPATIONAL HEALTH & SAFETY CONDITIONS OF CONTRACT:

##### 1. General Requirements

- 1.1 The contractor shall ensure that safety of all the workers, materials, Installation and equipments belonging to him or to others and working at the site is ensured through effective and practicable safety management systems.
- 1.2 The contractor shall be responsible for compliance to provisions of all safety requirements under various notices, acts, rules and relevant applicable legislations.
- 1.3 The contractors shall comply with all health & safety requirements as deemed necessary by BYPL from time to time.
- 1.4 Works shall be carried out by the contractor after taking necessary “Permit to work”. Also the work shall not be carried out without use of Protective equipment like shoes, safety belts, helmets etc. adhering to safety compliances.

##### 2. OHS Policy

The contractor as per requirement of CEA Measures Relating to Safety and Electric Supply, 2010 shall follow the Health & Safety policy of BYPL. The contractor shall implement health & safety management systems in accordance to BYPL health & safety policy and ensure that intentions of such health & safety policy are met.

**3. Health & Safety Plan**

Within 4 weeks of the notification of acceptance of the tender, the contractor shall submit a detailed and comprehensive Contract specific health & safety plan and HIRA (Hazard Identification & Risk Analysis) to BYPL. This plan shall necessarily include detailed policies, procedures, method statement for each activity to be performed and regulations which, when implemented, will ensure compliance of the contract provisions stated herewith.

The contractor shall submit health & safety plan for such activities required to be carried out under the awarded contract as deemed necessary by BYPL.

Health & safety plans, procedures, method statements, etc. developed & submitted by contractors shall be reviewed and approved by designated authorities of BYPL (Head Safety).

The health & safety plans, procedures, method statements, etc. shall not be changed without prior review and approval by designated authorities of BYPL.

**4. OHS Organization & Responsibility**

4.1 The contractor supervisor will play the role of safety supervisor, also simultaneously contractor has to ensure their competency in safety or EHS with 40 hours training from reputed agency or trainer, which should be verified earlier by BYPL safety department accordingly. The Training certificate should not be more than one year old.

4.2 Apart from above, as an owner of the company the contractor & their other key persons are also responsible for safety compliance and related issues.

**5. First Day at Work –Induction Training and Issuance of ID-Card**

5.1 The contractor shall ensure that all his workers have undergone the safety induction and have been issued with a valid ID card prior to start work at BYPL site.

5.2 All contractor workers shall undergo above as per the BYPL site specific procedure issued from time to time.

5.3 The contractor shall ensure that no worker is in any O&M activities until the valid ID card is issued and the same is available by each worker at site including that of sub contractor(s).

5.4 In case any worker lost the ID card issued to him, the contractor shall ensure that such incidences are promptly reported to BYPL and duplicate or new ID card is issued immediately after completing formalities as deemed necessary by BYPL.

**6. Provision of Safe Working Conditions**

6.1 The contractor shall ensure all the required PPEs given in clause 6.2 and shall allow their workers to start work at site only after proper verification of adequacy of safety gears/PPE required for the specific job at site by the Safety personnel/Site Engineer of BYPL.

**6.2 PPE’ REQUIREMENT**

6.2.1 Contractor has to provide the following PPE’s and ensure the quantity and quality of PPEs and continuous uses of following PPE’s by his staff.

S.NO.	NAME OF THE PPEs	LINEMAN / FITTER/SKILLED	HELPER/UNSKILLED	SUPERVISOR
1	SAFETY HELMET	✓	✓	✓
2	FULL BODY HARNESS (POSITIONING BELT)	✓	X	X

3	ELECTRICAL HAND GLOVES	✓	✓	X
4	SAFETY SHOES	✓	✓	✓
5	SAFETY GOGGLES	✓	✓	✓
6	REFLECTIVE JACKET	✓	✓	✓

6.2.2 Contractor has to ensure for proper procurement and distribution of required PPE's among their workers with receiving in attached format (Annexure- 1 under environmental, health & safety plan clause) which will be verified by the safety department during inspection. The entire issuance format duly signed by individual worker and to be verified/ certified by Department Head and the same need to be submitted to Safety Department.

6.2.3 If any of the contractor staff found without PPEs, the said PPE's will be issued them from BYPL store with immediate effect. And the 20% extra amount with procurement cost will be recovered from their next monthly bill cycle.

#### 6.2.4 Technical Specification of the PPEs

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

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

Lead MAKE: BATA/LIBERTY/HONEYWELL

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

V-GARD HDPE Yellow With 4 Point Fas Trac Ratchet Suspension

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

Additional	Low temperature -10°C (acc. to GB2811), High temperature +50°C
Colours	Yellow
Weight	360 g

Lead MAKE: 3M / KARAM / UFS

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

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

Lead MAKE: KARAM /LIFEGEAR/UFS/HONEYWELL

**6.2.4.4 Flex Chem Full View Safety Goggles** – Shall be used to protect workers eyes from foreign materials and flying particles. Mandatory for all personnel working at BYPL O&M. Safety goggles shall meet the following feature:

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

Technical Specification:

Weight	95g.
Lens thickness	1.0mm
Overall width	173mm
Overall length	90mm
Bridge	47.6mm
Lens base	5.5 curve
Lens size	86.1mm verticle, 174mm diagonal
Headband	Adjustable length at max.440mm(long enough to fit together with helmets)
Material & colors	
Lens	Acetate clear, coating, Sightgard + anti-fog according to EN 166 "N" & anti scratch.
Body	PVC smoke
Headband holder	Nylon
Headband	Adjustable grey elastic fixed on frame side parts
Marking / Approvals	
Standard number	EN 166
Frame marking	MSA EN 166 34-FT CE
Lens marking	2C-1.2 MSA 1 FT N CE
Filter class	2C (Ultra violet radiation with enhanced color recognition)
Scale number	1.2: luminous trasmittance-89%
Optical class	1 (best class, for permanent wear)
Mechanical resistance	F (low energy impact 45m/s) T (at extreme temperature - 5 to +55 <sup>0</sup> C)
Resistance to	N(distorted vision due to lens fogging)
UV filter	99.9%
Ordering information	10145578-FlexiChem Sightgard + clear , 6x

Lead MAKE: MSA / UVEX/ UFS/3M

**6.2.4.5Electrical Insulating Hand Gloves** – Shall be used to prevent electric shock based upon the hazards/risks involved in a particular activity. Safety goggles shall meet the following features:

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

	<b>For LT work</b>	<b>For HT work</b>
Length	360mm	360mm
Class	2	0
Thickness	3.6mm	1mm
Proof test voltage	20000	5000
Maximum use voltage	11000	1000

Tensile strength	>16mpa[Mega Pascal]
Puncture resistance	>18N/mm [Newton per mili meter]
Elongation at break	>600% [Stretching length]
Tension set	<15%

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

Lead MAKE: Honeywell / ANSELL

#### **6.2.4.6 Certificates required for all PPEs:**

1. Manufacturer Certificate
2. Test Certificate
3. Authorization of Dealership/Distribution ship

### **7. Integrated Management System & Audits**

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

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

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

### **8. Working at Height**

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

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

8.3 Full body harness and ladder along with the required PPEs shall be used during height work.

### **9. Reporting of Incidents / Dangerous Occurrences**

9.1 In case of any accident occurs during the O&M activities undertaken by the Contractor thereby causing a dangerous occurrence or any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be sole responsibility of the Contractor to promptly inform the same to divisional head in prescribed form and also to all authorities envisaged under the applicable laws.

## **10. Suspension of Work**

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

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

10.3 The contractor shall not be entitled to damages / compensation for suspending of work due to safety reasons and the period of such stoppage of work will not be taken as an extension of time for completion of the facilities as per the work order and will not be the ground for waiver of levy of liquidated damages.

10.4 The contractor shall follow and comply with all safety Rules of BYPL, relevant provisions of applicable laws pertaining to the safety of workmen, employees plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservation. In case of any inconformity between statutory requirement and safety rules of the BYPL referred above, the latter shall be binding on the contractor unless the statutory provisions are more stringent.

## **11. OHS Appreciation Policy**

11.1 If the contractor observes all the safety rules and codes, statutory laws and rules during the period of the contract awarded by the BYPL and no accident occurs then BYPL may consider the performance of the contractor and safety score card will be prepared. The best contractor will be appreciated by suitable "SAFETY AWARD" as per scheme as may be announced separately from time to time.

## **12. Safety Motivational Scheme for Contractor Employee**

12.1 All contractors must reward their employee monthly for best worker in term of complying safety norms. They should honour with a gift of Rs. 500/- (five Hundred) with commendation certificate to motivate others towards safety compliance. The record with photograph should kept with them & also to be submitted to BYPL safety department. Contractor may ask to BYPL safety people for their presence during awarding time.

12.2 All contractors have to observe safety day/ week on 4th March to 10th march every year with proper planning and record to create safety awareness inside their organization. A detailed report of observing the same to be forwarded to safety department every year.

## **13 Guidelines for Penalty Policy Implementation**

13.1 Total penalty shall be calculated by multiplying the number of safety violations and the penalty amount specified for such violations in Appendix - 1. (Example – If at first offence persons are found working without safety helmet at 3 locations, the penalty would be  $3 \times 2000 = \text{Rs.}6000/-$ )

13.2 The amount of penalty can be increased or decreased based upon the seriousness of safety violations. The decision of recommending authority shall be final one.

13.3 Recommending authority shall send his factual observations to Department Head and Safety Head who in turn shall either reject or approve it. If approved, he shall send it to Finance & Accounts for execution. Finance Accounts shall execute the penalty and confirm the same & shall send it back to Division Head and Safety Head.

13.4 Recommending Authority means the Department Head, Division Heads, HODs, Site Safety officer / Supervisor, representatives from OHS and other personnel authorized jointly by O&M.

13.5 Safety Head may impose penalty for serious violations directly.

13.6 All penalties shall be imposed directly on the concerned contractors. No penalty shall be imposed on individuals.

13.7 Safety violations to be considered for Penalty are classified as A, B & C

## 14. Guidelines for Safety Appreciation Policy Implementation

14.1 Recommending Authority shall write comments of his Appreciation in case he observes that there is no any safety violations in either of A, B or C classes.

14.2 Recommending Authority shall send his Safety Appreciation to Safety Head who in turn shall either approve or reject it and shall send it to Site Safety Officer for keeping in records.

14.3 Management will appreciate the Safe Contractors for their best performance towards safety norms based upon number of safety appreciation notes.

14.4 Every year best Safe Contractor shall be suitably awarded. The contractor shall be selected based upon the maximum numbers of approved safety appreciation notes.

14.5 Any contractor who has received any penalty for a particular year shall not be entitled for Safe Contractor's Award irrespective of number of safety appreciation notes he has received.

14.6 Site Safety Officer will maintain the contractor wise record of penalty & safety appreciation notes and declare the results latest by 28th February of every year for the performance of previous year.

14.7 BYPL Management shall present one Running Trophy with commendation certificate of safety excellence every year on the occasion of 4th to 11th March (National Safety Day) to the contractor, who qualified the safety standard criteria.

### Appendix – 1

#### Penalty Policy on Safety Violation

Class	Type of Offense	Penalty Detail	Execution Channel
A	Not Wearing Safety Helmets Safety shoes/ Safety Goggles / Electrical insulating hand/ Not using electrically safe tools and equipments. (Poor quality or damaged item means noncompliance)	# First Offence - Warning Note & Rs.2000/- # Second Offence - Warning Note & Fine of Rs.5000/- # Third Offence- Note of recommendation of the concerned workmen/ supervisors for termination of his job & Fine of Rs.15000/-	Recommendation by OHS- Representative/Department Head Approval by Safety Head Deduction by Finance & Account
B	Not wearing Full Body Harness/fall arresters while working at a height more than 1.8 meter or wherefrom a person may fall. Not using Safety Net to arrest falling objects and personnel. (Poor quality or damaged item means noncompliance)	# First Offence -Warning Note & Fine of Rs.5000/- # Second Offence - Warning Note for dismissal and a Fine of Rs.10000/- # Third Offense - -Action for the concerned workman/ supervisor for termination of his job and a fine of Rs.25000/-	Recommendation by OHS- Representative/Department Head Approval by Safety Head Deduction by Finance & Account
C	Any other unsafe work practices or condition which is considered having potential for fatality or injury to personnel.	# First Offence - Warning Note & Fine of Rs.10000/- # Second Offence - Action for the concerned workmen/ supervisors for termination of his job and fine	Recommendation by OHS- Representative/Department Head Approval by Safety Head Deduction by Finance & Account



		of Rs.20000/-.	
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Notes:

- # Refer clause No. 13 for penalty policy implementation guidelines
- # Refer clause No. 14 for appreciation policy implementation guidelines.
- # If there are 03 violations by an individual employee, services will be terminated.
- # If there are 10 violations in one quarter, will be recommended for termination of contract order.

**Annexure-1**

**Format for PPE's Receipt by workers**

Name of Site -----

Division-----

Name of Contractor -----

S. N	NAME	DESI.	Safety Helmet	Electrical Insulating	Full Body Harness	Safety Shoes	Safety Goggle	Reflective Jacket	SIGNATURE
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O.				Hand gloves					

Signature of Contractor / Date.....

## ANNEXURE A

The Contractor should obtain and submit the following details before Commencement of work.

- Certificate of registration under Contract labour (R & A) Act 1970.
- PF Code No. and all employees to have PF A/c No. under PF Act, 1952
- All employees to have a temporary or permanent ESI Card as per ESI Act.
- ESI Registration No.
- To follow Minimum Wages Act prevailing in the state.
- Salary/ Wages to be distributed not later than 7th of each month in presence of Engineer in Charge. A certificate to this effect should be certified & enclosed with the bill.
- To maintain Wage cum Attendance Register.
- To maintain First Aid Box at Site.
- Service Tax registration number.
- Electrical License.
- Workmen compensation policy.
- Third party Insurance Policy & Insurance policy\* . \* Accidental insurance policy for the staff engaged by him for this work to insure against any loss of life which may occur during the contract for the work of the COMPANY. The policy shall have coverage of Rs. 10 Lacs (Table C- Death + Permanent Total Disability + Partial permanent Disability due to external accidents). The premium amount for such life cover policy shall be borne by the contractor. The contractor shall furnish copy of policy when demanded by BYPL
- Registration of Contractors & Contractual Employees under Building & other Construction Worker Welfare Cess Act 1996 & The Building & other Construction Workers (Regulation of Employment & Conditions of services) Act 1996.
- The Delhi Building and other Construction Worker (Regulation of Employment and Conditions of Services) Rules 2002 (B.O.C.W.).
- The CONTRACTOR shall give a written declaration / undertaking on or before 15th of the following month that he has complied with the following:
  - Has paid minimum wages to his manpower.
  - Deduct and deposited ESI/PF contribution. Copy of the same shall be submitted.

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- Third party Insurance Policy & Insurance policy\* .

\* Accidental insurance policy for the staff engaged by him for this work to insure against any loss of life which may occur during the contract for the work of the COMPANY. The policy shall have coverage of Rs. 10 Lacs (Table C- Death + Permanent Total Disability + Partial permanent Disability due to external accidents). The premium amount for such life cover policy shall be borne by the contractor. The contractor shall furnish copy of policy when demanded by BYPL

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## SECTION- IV

### SCOPE OF WORK:

#### (1) SCOPE OF WORK FOR ONSITE REPAIR OF RMU/ ACB:

##### (1)-a SCOPE OF WORK FOR REPAIR OF ACB:

The scope of work of the contractor shall be as under:

#### **(i) Dismantling of ACBs mechanism:**

- " Dismantling of stationary arcing contact
- " Dismantling of contact
- " Dismantling of stationary main contact
- "Dismantling of Molded base.
- " Dismantling of hinge
- " Dismantling of copper ribbon lead
- " Dismantling of contact holder
- " Dismantling of contact spring
- " Dismantling of contact tips.
- " Dismantling of operating rod
- " Dismantling of lock nut.
- " Dismantling of adjusting screw.
- " Dismantling of contact arm pin
- " Dismantling of moving main contact
- " Dismantling of moving arching contact.
- " Dismantling of crossbar.
- " Dismantling of connecting lever.
- " Dismantling of trip spring
- " Dismantling of charging handle
- " Dismantling of reset spring

- " Dismantling of closing link.
- " Dismantling of trip piece.
- " Dismantling of trip lever.
- " Dismantling of release wiring
- " Dismantling of CT's wiring.
- " Dismantling of ACB front cover
- " Dismantling of ACB top cover.
- " Dismantling of bakelite separator
- " Dismantling of ACB arc chute protector
- " Dismantling of release / relay.
- "Dismantling of toggle link.
- " Dismantling of trigger.
- " Dismantling of carbon ribbon lead.
- " Dismantling of closing spring.
- " Dismantling of charging latch
- " Dismantling of charging hook
- " Dismantling of drive pawl.
- " Dismantling of ratchet wheel.
- " Dismantling of drive lever.
- " Dismantling of. ratchet wheel link
- " Dismantling of closing spring lever
- " Dismantling of charging lever link
- " Dismantling of open close indicator
- " Dismantling of quick close / slow close selector lever
- " Dismantling of shunt / series coil.
- " Dismantling of incoming /out going bus bar.

**(ii) Repairing work on ACB**

- " Repairing of stationary arcing contact
- " Repairing of stationary main contact
- " Repairing of Molded base.
- " Repairing of hinge.
- " Repairing of copper ribbon lead.
- " Repairing of contact holder.
- " Repairing of contact spring.
- " Repairing of contact tips.
- " Repairing of operating rod.
- " Repairing of lock nut.
- " Repairing of contact arm pin.
- " Repairing of moving main contact
- " Repairing of moving arching contact.
- " Repairing of crossbar.
- " Repairing of connecting lever.
- " Repairing of charging handle.
- " Repairing of reset spring
- " Repairing of closing link.
- " Repairing of trip piece.
- " Repairing of trip lever.
- " Repairing of release wiring.
- " Repairing of CT's wiring.
- " Repairing of ACB front cover.
- " Repairing of ACB top cover.
- " Repairing of bakelite separator.

"Repairing of AC8 arc chute protector

"Repairing of release/ relay.

"Repairing of toggle link.

"Repairing of trigger.

"Repairing of carbon ribbon lead.

"Repairing of closing spring.

"Repairing of charging latch

"Repairing of charging hook

"Repairing of drive pawl.

"Repairing of ratchet wheel.

"Repairing of drive lever.

"Repairing of. ratchet wheel link

"Repairing of closing spring lever

"Repairing of charging lever link

Repairing of open close indicator

Repairing of quick close/ slow close selector lever

"Repairing of shunt/ series coil

."Repairing of incoming /out going bus bar.

### **(iii) Assembling of ACB**

" Assembling/ replacement of stationary arcing contact

" Assembling/ replacement of stationary main contact

" Assembling/ replacement of molded base.

" Assembling/ replacement of hinge.

" Assembling/ replacement of copper ribbon lead.

" Assembling / replacement of contact holder.

" Assembling / replacement of contact spring.



- " Assembling / replacement of contact tips.
- " Assembling / replacement of operating rod.
- " Assembling / replacement of lock nut.
- " Assembling / replacement of adjusting screw.
- " Assembling / replacement of contact arm pin.
- " Assembling / replacement of moving main contact
- " Assembling / replacement of moving arching contact.
- " Assembling / replacement of crossbar.
- " Assembling / replacement of connecting lever.
- " Assembling / replacement of trip spring.
- " Assembling / replacement of charging handle.
- " Assembling / replacement of reset spring
- " Assembling / replacement of closing link.
- " Assembling / replacement of trip piece.
- " Assembling / replacement of trip lever.
- " Assembling / replacement of release wiring.
- " Assembling / replacement of CT's wiring.
- " Assembling / replacement of ACE front cover.
- " Assembling / replacement of ACB top cover.
- " Assembling / replacement of bakelite separator.
- " Assembling / replacement of ACB arc chute protector
- " Assembling / replacement of release / relay.
- " Assembling / replacement of toggle link.
- " Assembling / replacement of trigger.
- " Assembling / replacement of carbon ribbon lead.

- " Assembling / replacement of closing spring.
- " Assembling / replacement of charging latch
- " Assembling / replacement of charging hook
- " Assembling / replacement of drive pawl.
- " Assembling / replacement of ratchet wheel.
- " Assembling / replacement of drive lever.
- " Assembling / replacement of ratchet wheel link
- " Assembling / replacement of closing spring lever
- " Assembling / replacement of charging lever link
- " Assembling / replacement of open close indicator
- " Assembling / replacement of quick close / slow close selector lever
- " Assembling / replacement of shunt/ series coil.
- " Assembling / replacement of incoming out going bus bar

#### 4. **Overhauling of ACB mechanism:**

- " Overhauling of CB mechanism.
- " Overhauling of CT.
- " Overhauling of wiring & protection equipment

#### 5. **Test of ACB**

- " Mechanical operation checks i.e. manual closing / opening of breaker.
- " Check the change over switch ( NO & NC )
- " Check of AOI.
  - (i) With GO gauge(0.5mm) ACB should be trip.
  - (ii) With GO gauge(1 mm) ACB should not be trip.

## 6. Calibration of releases:

Resistance measurement of coil (shunt trip, closing, UVT & MHT coils)

Testing of EFR

Testing of UIT -100 relay

Testing of all Micro process, static & digital relays.

With 24V DC supply check breaker trip for LTD at min. & max. Time setting

With 24 V DC supply check breaker trip for STD at min.& max. Time setting

Testing of thermal Overload relay

Testing of spring charge indication switch.

Testing of trip indication switch.

Testing of OCR alarm switch

Dielectric withstand

3.1 KV for 1 mint. In power circuit.

1KV for 30sec . In control circuit IR value test- Min500 M ohm(R,Y,B,N)

Visual check of accessories.

## **(1)-bSCOPE OF WORK FOR REPAIR OF RMU:**

The scope of work for RMU repair by the contractor shall be as under:

### **(i) Dismantling of RMU mechanism:**

- Dismantling of CB operating mechanism.
- Dismantling of CB isolator mechanism.
- Dismantling of CB earthing mechanism.
- Opening of CB HV termination point.
- Opening of CB HV bushing.
- Dismantling of Isolator operating mechanism.
- Dismantling of Isolator earthing mechanism.
- Opening of Isolator HV termination point.
- Opening of Isolator HV bushing.
- Opening of CB termination cover.
- Opening of CB cleat & clamp.
- Opening of Isolator termination cover.
- Opening of Isolator cleat & clamp.
- Opening of CB operating mechanism side cover.
- Opening of CB operating mechanism front cover.
- Opening of Isolator operating mechanism side cover.
- Opening of Isolator operating mechanism front cover.
- Dismantling of CB CT's.
- Dismantling CB relay.
- Dismantling of VIP (voltage presence indicator) of CB.
- Dismantling of VIP (voltage presence indicator) of Isolator.

- Dismantling CB relay termination& wiring.
- Dismantling of VIP wiring.
- Dismantling of CT's wiring.
- Dismantling of RMU front cover.
- Dismantling of RMU front door.
  
- Dismantling of RMU side cover.
  - Dismantling of RMU top cover.
  - Removal Isolator test point.
  - Removal of Relay wiring.
  - Removal of FPI / EFI equipment.
  - Removal of damage earth strips of RMU.
  - Dismantling of SF6 Mano meter.
  - Dismantling of SF6 Mano meter socket.
  - Dismantling of SF6 gas out let point.
  - Removal of ON-OFF Button of CB.
  - Removal of ON-OFF mechanism of CB.
  - Removal of SF6 gas from RMU chamber.
  - Removal of termination boot of CB.
  - Removal of termination boot of Isolator.

**(ii) Repairing work on SF6 RMU:**

- Repairing of CB operating mechanism.
- Repairing of CB ON-OFF mechanism.
- Repairing of CB Isolator mechanism.
- Repairing of CB Earthing mechanism.
- Repairing of Isolator operating mechanism.
- Repairing of Isolator Earthing mechanism.
- Repairing of CB to Isolator interlock mechanism.
- Repairing of Isolator to Earthing interlock mechanism.
- Refilling of SF6 gas in RMU chamber.
- Checking of SF6 gas pressure in RMU.
- Repairing of HV bushing.
- Repairing of VPI.
- Repairing of VPI termination.
- Repairing of FPI / EFI.
- Changing CT's wiring.
- Changing Relay wiring.
- Changing FPI / EFI wiring.
- Changing VPI wiring.
- De-Brazing of HV terminal.
- Cleaning of carbon from HV bushing.
- Cleaning of carbon from termination point of CB.
- Cleaning of carbon from termination point of Isolator.
- Cleaning of carbon / dust from RMU body.
- Painting work on RMU Cover.
- Painting work on RMU body.

- Denting work on RMU cover.
- Denting work on RMU body.
- Fabrication of RMU termination covers (CB/Isolator)
- Fabrication of RMU side covers(CB/Isolator).
- Fabrication of RMU front covers (CB/Isolator)
- Repairing of RMU Hydraulic door lever.
- Replacing of RMU Hydraulic door lever.
- Repairing of RMU door mechanism

(iii) **Assembling of RMU:**

- Placing of Old HV bushing.
- Replacing of ohra ring of bushing
- Replacing of HV bushing.
- Replacing of HV bushing rod.
- Replacing of bushing nut bolt & washer.
- Placing of boot on termination.
- Placing of front door of RMU.
- Replacing of front door of RMU.
- Replacing of front door lever.
- Replacing of front door mechanism.
- Replacement of CB termination cover.
- Placing of CB termination cover.
- Replacement of CB termination cover.
- Replacement of CB Side covers.
- Placing of CB side cover.
- Replacement of Isolator termination cover.
- Placing of Isolator termination cover.
- Replacement of Isolator side cover.
- Placing of Isolator front cover.
- Placing of RMU front cover.
- Refitting of RMU top cover.
- Re-brazing of HV terminal of CB.
- Re-brazing of HV terminal of Isolator.
- Refitting of SF6 Mano meter.
- Replacement of SF6 Mano meter.
- Refitting of SF6 socket of RMU.
- Refitting of SF6 gas out let point of RMU chamber.
- Re-brazing of HV bushing rod.
- Refitting of FPI/EFI.
- Refitting of VPI.
- Refitting of CB CT's.
- Refitting of test point of Isolator.
- Refitting of Earth strip of RMU.
- New Earth strip provide in RMU.
- Refitting of ON-OFF button of CB.
- Refitting of CB mechanism.

- Refitting of CB Isolator mechanism.
- Refitting of CB Earth mechanism.
- Refitting of CB to Isolator Interlock mechanism.
- Refitting of CB, Isolator to Earth Interlock mechanism.
- Refitting of Isolator Interlock mechanism.
- Providing Mimic line on RMU cover.
- Operational test of CB & Isolator.
- Interlock functioning test.
- Power frequency test.
- Auxiliary wiring test.
- Verification of wiring circuit.
- Relay functioning test.
- Voltage Indication test.
- FPI/ EFI test.
  
- Gas leak test.
  - Insulation resistance test.
  - Overhauling of RMU mechanism
  - Overhauling of CB mechanism.
  - Overhauling of Isolator mechanism.
  - Overhauling of Interlock mechanism.
  - Overhauling of Isolator test mechanism.

**TERMS AND CONDITIONS FOR ONSITE REPAIRING:**

Vendor to provide:

1) Supervisor with technician & helpers. Minimum no. of manpower / vehicle to be provided shall be as under:

- i) Supervisor (Diploma / Degree) -1 no per team
- ii) Technician (ITI) -1 no per team
- iii) Helper - 2 nos. per team
- iv) Welder
- v) Commercial Tata Sumo / similar vehicle, 12 hrs per day – 1 No. per team
- 2) Complete set of tool & tackles. List of Tools & tackles as per annexure
- 3) Complete set of machinery required for service/repair of ACB's/RMUs as per annexure
- 4) Petty items as per Section-V
- 5) Generator set -- 1 No. 5kva

BSES to provide:

- Free electricity at workshop or indoor s/stn, at site vendor has to arrange their own .
- Electronic relay of ACBs/RMU excluding petty item.
- Testing lab
- covered shed at workshop

## **(2) SCOPE OF WORK FOR INHOUSE REPAIR OF ACB/RMU AT BYPL WORKSHOP:**

The scope of work of the contractor for inhouse repair of ACBs at workshop shall be as under:

### **1. Dismantling of ACBs mechanism:**

- Dismantling of stationary arcing
- Dismantling of contact
- Dismantling of stationary main contact
- Dismantling of Molded base.
- Dismantling of hinge
- Dismantling of copper ribbon lead
- Dismantling of contact holder
- Dismantling of contact spring
- Dismantling of contact tips.
- Dismantling of operating rod
- Dismantling of lock nut.
- Dismantling of adjusting screw.
- Dismantling of contact arm pin
- Dismantling of moving main contact
- Dismantling of moving arching contact.
- Dismantling of crossbar.
- Dismantling of connecting lever.
- Dismantling of trip spring
- Dismantling of charging handle
- Dismantling of reset spring
- Dismantling of closing link.
- Dismantling of trip piece.
- Dismantling of trip lever.
- Dismantling of release wiring
- Dismantling of CT's wiring.
- Dismantling of ACB front cover
- Dismantling of ACB top cover.
- Dismantling of bakelite separator
- Dismantling of ACB arc chute protector
- Dismantling of release / relay.
- Dismantling of toggle link.
- Dismantling of trigger.
- Dismantling of carbon ribbon lead.
- Dismantling of closing spring.
- Dismantling of charging latch
- Dismantling of charging hook
- Dismantling of drive pawl.
- Dismantling of ratchet wheel.
- Dismantling of drive lever.
- Dismantling of. ratchet wheel link
- Dismantling of closing spring lever

- Dismantling of charging lever link
- Dismantling of open close indicator
- Dismantling of quick close / slow close selector lever
- Dismantling of shunt / series coil.
- Dismantling of incoming /out going bus bar.

## 2. **Repairing work on ACB:**

- Repairing of stationary arcing contact
- Repairing of stationary main contact
- Repairing of Molded base.
- Repairing of hinge.
- Repairing of copper ribbon lead.
- Repairing of contact holder.
- Repairing of contact spring.
- Repairing of contact tips.
- Repairing of operating rod.
- Repairing of lock nut.
- Repairing of contact arm pin.
- Repairing of moving main contact
- Repairing of moving arching contact.
- Repairing of crossbar.
- Repairing of connecting lever.
- Repairing of charging handle.
- Repairing of reset spring
- Repairing of closing link.
- Repairing of trip piece.
- Repairing of trip lever.
- Repairing of release wiring.
- Repairing of CT's wiring.
- Repairing of ACB front cover.
- Repairing of ACB top cover.
- Repairing of bakelite separator.
- Repairing of AC8 arc chute protector
- Repairing of release/ relay.
- Repairing of toggle link.
- Repairing of trigger.
- Repairing of carbon ribbon lead.
- Repairing of closing spring.
- Repairing of charging latch
- Repairing of charging hook
- Repairing of drive pawl.
- Repairing of ratchet wheel.
- Repairing of drive lever.
- Repairing of. ratchet wheel link
- Repairing of closing spring lever
- Repairing of charging lever link
- Repairing of open close indicator
- Repairing of quick close/ slow close selector lever



- Repairing of shunt / series coil.
- Repairing of incoming/out going bus bar.

### **3. Assembling of ACB:**

- Assembling / replacement of stationary arcing contact
- Assembling / replacement of stationary main contact
- Assembling / replacement of molded base.
- Assembling / replacement of hinge.
- Assembling / replacement of copper ribbon lead.
- Assembling / replacement of contact holder.
- Assembling / replacement of contact spring.
- Assembling / replacement of contact tips.
- Assembling / replacement of operating rod.
- Assembling / replacement of lock nut.
- Assembling / replacement of adjusting screw.
- Assembling / replacement of contact arm pin.
- Assembling / replacement of moving main contact
- Assembling / replacement of moving arching contact.
- Assembling / replacement of crossbar.
- Assembling / replacement of connecting lever.
- Assembling / replacement of trip spring.
- Assembling / replacement of charging handle.
- Assembling / replacement of reset spring
- Assembling / replacement of closing link.
- Assembling / replacement of trip piece.
- Assembling / replacement of trip lever.
- Assembling / replacement of release wiring.
- Assembling / replacement of CT's wiring.
- Assembling / replacement of ACE front cover.
- Assembling / replacement of ACB top cover.
- Assembling / replacement of bakelite separator.
- Assembling / replacement of ACB arc chute protector
- Assembling / replacement of release / relay.
- Assembling / replacement of toggle link.
- Assembling / replacement of trigger.
- Assembling / replacement of carbon ribbon lead.
- Assembling / replacement of closing spring.
- Assembling / replacement of charging latch
- Assembling / replacement of charging hook
- Assembling / replacement of drive pawl.
- Assembling / replacement of ratchet wheel.
- Assembling / replacement of drive lever.
- Assembling / replacement of. ratchet wheel link
- Assembling / replacement of closing spring lever
- Assembling / replacement of charging lever link
- Assembling / replacement of open close indicator

- Assembling / replacement of quick close / slow close selector lever
- Assembling / replacement of shunt/ series coil.
- Assembling / replacement of incoming & out going bus bar

#### 4. Overhauling of ACB mechanism

- Overhauling of CB mechanism.
- Overhauling of CT.
- Overhauling of wiring & protection equipment

#### 5. Test of ACB

Mechanical operation checks i.e. manual closing / opening of breaker.

Check the change over switch ( NO & NC )

Check of AOI.

With GO gauge(0.5mm) ACB should be trip.

With GO gauge(1 mm) ACB should not be trip.

Calibration of releases

Resistance measurement of coil (shunt trip, closing, UVT& MHT coils)

Testing of EFR

Testing of UIT -100 relay

Testing of all Micro process, static & digital relays.

With 24V DC supply check breaker trip for LTD at min. & max. Time setting

With 24 V DC supply check breaker trip for STD at min.& max. Time setting

Testing of thermal Overload relay

Testing of spring charge indication switch.

Testing of trip indication switch.

Testing of OCR alarm switch

Dielectric withstand

3.1 KV for 1 mint. In power circuit.

1KV for 30 sec In control circuit.

IR value test - Min 500 M ohm(R,Y,B,N)

Visual check of accessories.

**The scope of work for RMU repair at workshop by the contractor shall be as under:**

(i) **Dismantling of RMU mechanism:**

- Dismantling of CB operating mechanism.
- Dismantling of CB isolator mechanism.
- Dismantling of CB earthing mechanism.
- Opening of CB HV termination point.
- Opening of CB HV bushing.

- Dismantling of Isolator operating mechanism.
- Dismantling of Isolator earthing mechanism.
- Opening of Isolator HV termination point.
- Opening of Isolator HV bushing.
- Opening of CB termination cover.
- Opening of CB cleat & clamp.
- Opening of Isolator termination cover.
- Opening of Isolator cleat & clamp.
- Opening of CB operating mechanism side cover.
- Opening of CB operating mechanism front cover.
- Opening of Isolator operating mechanism side cover.
- Opening of Isolator operating mechanism front cover.
- Dismantling of CB CT's.
- Dismantling CB relay.
- Dismantling of VIP (voltage presence indicator) of CB.
- Dismantling of VIP(voltage presence indicator) of Isolator.
- Dismantling CB relay termination& wiring.
- Dismantling of VIP wiring.
- Dismantling of CT's wiring.
- Dismantling of RMU front cover.
- Dismantling of RMU front door.
- Dismantling of RMU side cover.
- Dismantling of RMU top cover.
- Removal Isolator test point.
- Removal of Relay wiring.
- Removal of FPI / EFI equipment.
- Removal of damage earth strips of RMU.
- Dismantling of SF6 Mano meter.
- Dismantling of SF6 Mano meter socket.
- Dismantling of SF6 gas out let point.
- Removal of ON-OFF Button of CB.
- Removal of ON-OFF mechanism of CB.
- Removal of SF6 gas from RMU chamber.
- Removal of termination boot of CB.
- Removal of termination boot of Isolator.

**(ii) Repairing work on SF6 RMU:**

- Repairing of CB operating mechanism.
- Repairing of CB ON-OFF mechanism.
- Repairing of CB Isolator mechanism.
- Repairing of CB Earthing mechanism.
- Repairing of Isolator operating mechanism.
- Repairing of Isolator Earthing mechanism.
- Repairing of CB to Isolator interlock mechanism.
- Repairing of Isolator to Earthing interlock mechanism.
- Refilling of SF6 gas in RMU chamber.
- Checking of SF6 gas pressure in RMU.
- Repairing of HV bushing.

- Repairing of VPI.
- Repairing of VPI termination.
- Repairing of FPI / EFI.
- Changing CT's wiring.
- Changing Relay wiring.
- Changing FPI / EFI wiring.
- Changing VPI wiring.
- De-Brazing of HV terminal.
- Cleaning of carbon from HV bushing.
- Cleaning of carbon from termination point of CB.
- Cleaning of carbon from termination point of Isolator.
- Cleaning of carbon / dust from RMU body.
- Painting work on RMU Cover.
- Painting work on RMU body.
- Denting work on RMU cover.
- Denting work on RMU body.
- Fabrication of RMU termination covers (CB/Isolator)
- Fabrication of RMU side covers(CB/Isolator).
- Fabrication of RMU front covers (CB/Isolator)
- Repairing of RMU Hydraulic door lever.
- Replacing of RMU Hydraulic door lever.
- Repairing of RMU door mechanism

**(iii) Assembling of RMU:**

- Placing of Old HV bushing.
- Replacing of ohra ring of bushing
- Replacing of HV bushing.
- Replacing of HV bushing rod.
- Replacing of bushing nut bolt & washer.
- Placing of boot on termination.
- Placing of front door of RMU.
- Replacing of front door of RMU.
- Replacing of front door lever.
- Replacing of front door mechanism.
- Replacement of CB termination cover.
- Placing of CB termination cover.
- Replacement of CB termination cover.
- Replacement of CB Side covers.
- Placing of CB side cover.
- Replacement of Isolator termination cover.
- Placing of Isolator termination cover.
- Replacement of Isolator side cover.
- Placing of Isolator front cover.
- Placing of RMU front cover.
- Refitting of RMU top cover.
- Re-brazing of HV terminal of CB.
- Re-brazing of HV terminal of Isolator.
- Refitting of SF6 Mano meter.

- Replacement of SF6 Mano meter.
- Refitting of SF6 socket of RMU.
- Refitting of SF6 gas out let point of RMU chamber.
- Re-brazing of HV bushing rod.
- Refitting of FPI/EFI.
- Refitting of VPI.
- Refitting of CB CT's.
- Refitting of test point of Isolator.
- Refitting of Earth strip of RMU.
- New Earth strip provide in RMU.
- Refitting of ON-OFF button of CB.
- Refitting of CB mechanism.
- Refitting of CB Isolator mechanism.
- Refitting of CB Earth mechanism.
- Refitting of CB to Isolator Interlock mechanism.
- Refitting of CB, Isolator to Earth Interlock mechanism.
- Refitting of Isolator Interlock mechanism.
- Providing Mimic line on RMU cover.
- Operational test of CB & Isolator.
- Interlock functioning test.
- Power frequency test.
- Auxiliary wiring test.
- Verification of wiring circuit.
- Relay functioning test.
- Voltage Indication test.
- FPI/ EFI test.
- Gas leak test.
  - Insulation resistance test.
  - Overhauling of RMU mechanism
  - Overhauling of CB mechanism.
  - Overhauling of Isolator mechanism.
  - Overhauling of Interlock mechanism.
  - Overhauling of Isolator test mechanism.

## **6. Disposal of Waste Material:**

In workshop during repair work some waste material is generated including Hazardous wastes which are polluting the environment & throwing it in garbage is a violation of National Green tribunal rules, detail of some items are as under:

- Waste Kerosene oil
- Waste Kerosene oil used cloths
- Waste paint generated while painting work.
- Waste cloths used while painting work.
- Waste bakelite & polycarbonate sheets
- Electronic circuits of damage relays etc.

Disposal of hazardous waste through any agency authorized by pollution control Bureau shall be in the scope of contractor.

**TERMS AND CONDITIONS FOR INHOUSE REPAIRING:**

Vendor to provide:

- 1) Sufficient no's of Engr., Supervisor technician, Electrician, welder, painter & helpers should be provided by vendor for repairing of ACBs/RMU per month.
  - i) Supervisor (Diploma / Degree) -1 no per team
  - ii) Technician (ITI) -1 no per team
  - iii) Helper - 3 nos. per team
  - iv) Welder/Fabricator v) Painter 1 no.
  - vi) Electrician 1 no. per team
- 2) Complete set of tool & tackles. List of Tools & tackles is enclosed as Section-V
- 3) Complete set of machinery required for service/repair of ACB's/RMU as per Section-V
- 4) Petty items as per Section-V

BSES to provide:

- Free electricity.
- Spare part of different make of RMU are provided to you except petty item
- SF6 gas for RMU
- Spare part of ACB are in vendor scope except (electronic relay ).
- Testing lab
- Covered shed

## SECTION -V

### **(A) LIST OF T&P:**

#### **Provided for Onsite & in house repairing for each team**

S.No.	TOOLS DESCRIPTION	QUANTITY/team
1.	Screw Driver set	1 SET
2.	Combination Flier (8 inch)	1 SET
3.	Nose Plier	1 SET
4.	D-Spanner set	1 SET
5.	Ring- Spanner set	1 SET
6.	Richet set (small &Big)	1 SET
7.	Hack saw	1 no
8.	Hammer 0.5 KG	1 no
9.	Hammer 1 KG	1 no
10.	Hammer 2 KG	1 no
11.	Soft Hammer	1 no
12.	Chisel 6" & 8"	1 no
13.	File flat	1 no
14.	File round	1 no
15.	File Half round	1 no
16.	File Triangular	1 no
17.	Hole punch set	1 no
18.	Bench Vice	1 no
19.	Soldring iron	1 no
20.	Blow lamp	1 no
21.	Short circuit chain	1 no
22.	Discharge rod	1 no
23.	Elen Key set	1 no
24.	Dry cell torch	1 no
25.	Drill Bit	1 no
26.	Line Tester	1 no
27.	Racket Bit set	1 no
28.	Torque wrech	1 no
29.	SF6 gas recycling unit	1 no
30.	Tri Pot for 1 Ton load	1 SET
31.	small star key	1 SET
32.	Hot gun	1 SET
33.	TAP SET	1 SET

Any specific tool for RMU repairing work as required

Any specific tool for ACB repairing work as required

## **(B) LIST OF MACHINERY**

### **List of Machinery to be provided by the contractor for Onsite repairing of RMU/ ACB:**

Following machinery / equipments / instruments to be provided by vendor:

Sr no	DESCRIPTION	QUANTITY
1	Clamp meter Digital upto 1000 AMP	2 no
2	Digital Multimeter	2 no
3	Digital insulation tester 5KV Rating	1 no
7	Welding machine	1 no
8	Power press machine	1 no
9	Hand drill machine	1 no
10	Air blower 2 kw	1 no
11	cutter machine	1 no
12	zig saw machine	1 no
13	Hand Grinder	1 no
14	Thermal IR Gun from -5 TO 250 DEG CELCIUS	1 no
15	Clamp meter digital up to 2000A	1 no
16	Clamp meter digital 20 mili Amp to 20 Amp	1 no
21	Silicon paste for bushing-	as req
22	Gas kit –	as req
23	Spray paint machine	1 no
24	weighing machine upto 1000kg	1 no
25	Table drill machine	1 no
26	chain pulley set	1 no
27	Trolley for moving RMU	1 no
28	Angle cutter	1 no
29	Table mounted Grinder	1 no
30	Tri Pod for 1 ton load	1 no
	Any other specific machine /equipment for ACB/RMU repair work	

## **( C ) PETTY ITEMS COVERED UNDER VENDOR'S SCOPE:**

Petty items shall cover the following items per ACB i.e. front cover for all make & all capacity (400 amp to 2000A), ACBs Top cover for all make & all capacity, Bakelite sheet,



FRP sheet, Aluminium Bus-bar of various size, M-Seal, Pla relay, Pla relay base, Indicator - Green & Red, buff ,Welding rod, steel nuts & bolts of all size & shapes, washers of all type, FRP phase separator, Arc chute for all make of ACBs, thinner, kerosene/tarpen oil, brushes of all size for painting and cleaning, cleaning powder & liquid, batteries of various size, socket & thimbles of various size, 4 colour 2.5 mm flexible copper wire, bearing/ bushes, rivets, lubricant oil, grease, mask for buffing, indicator- green & red, gloves, operating knobs of ACB, operating handles, varnish, cotton tapes, adhesive, ties, springs, bus bar spacer, fibre pipe, Gloves & mask for grinding & buffing work , Zig saw machine for cutting iron sheets, Power press for moulding aluminium bus bar, epoxy spray paint for CTs, operating ON-OFF knob of ACBs 10 mm,12 mm & 16 mm nut bolt & washers with repaired ACBs.

Petty item shall cover M-seal , welding rod , steel nuts & bolts of all size & shapes , washers of all type , thinner , kerosene /tarpen oil, brushes of all size for painting and cleaning , cleaning powder & liquid , batteries of varous size , socket & thimbles of various size , 4 color2.5mm flexible copper wire , RMU copper contacts , bearing /bushes, rivets ,lubricant oil, grease , mask for buffing , indicator –green & rod ,buff ,gloves ,operating knobs of RMUs,operating handles ,varnish ,cotton tapes ,adhesive ,ties ,springs ,bus bar spacer , fiber pipe , backelite sheet , front door ,hydraulic cover ,isolator cover ,circuit breaker covers ,silicon sealant ,gasket for CGL& Schneider o/d RMUs,High pressure silicon grease of -25 deg c to 250 deg c, High pressure Gasket ,High pressure sealant etc.

#### **LIST OF RATING & MAKES FOR ACB/ RMU:**

(A) Ratings for ACB are 400 A/ 800A/ 1250A/ 2000A. Makes are as under:

Makes for ACB
L&T
C&S
GE
CG
HPL
Havells
Schneider
helcon
Jyoti
Mohini

(B) Type of RMU are 1way I/D, 1way O/D, 3Way I/D, 3Way O/D & 4 way I/D, 4 way O/D Makes are as under;

Make
ABB
C&S
CGL
Merlin Gerin
Schneider
Saame
Schneider Ring Master
Siemens
Lucy
Areva
Alstom
Schinder FBX

## SECTION–VI: PRICE FORMAT

GST at actual shall be paid extra on the above quoted rate.

### a) Activity RMU in house

S.No.	Proposed Scope of work	UOM	Proposed Rates(I/C OF ALL TEAXES EXCEPT GST)
1	Lifting of faulty RMU from store ,Cleaning with air blower / cotton cloth ,Carrying out complete electrical & mechanical intial testing on RMU which includes>Contact Restance testing,Contnuity test & High voltage PC test by vendor staff in the presence of BSES staff, . washing with high pressure jet pump after removing all covers & electrical parts like Relay,CTs ,FPIs etc per way (Crane for lifting will be provided by the BSES)	EA	
2	Completing the cable holding compartment in all repect by refixing existing cleats/fixing missing wooden cleats ,c clamps, U shape strip & other cleat hoding arrangement as per requirement per way	EA	
3	PDI inspection & its certification from graduate /technical qualified Er which includes Relay functioning test by primary injection,FPI & VPIS working,PC Test,CRM test,Continuity test , checking of SF6 gas staus ,Inter locking ,Mechanically oeration test of Isolator,breaker & Earth switch,status of Earthing busbar, Cover placement etc per RMU	EA	
4	Repairing of RMU for all types of external mechanical fault & activities which includes refixing/replacement/repair in breaker /isolator/interlocking/earth mechanisum,manometer,trip coils,tripper ,reset strip,firing link rod,push button, hand operating socket,Z shape liver,On/Off indications,covers,partions,supports, frame, allignments & making RMU fully operational externally per way	EA	
5	Dismantaling/refixing/replacemnt of protection realy ,repairing/Replacement of wiring ,refixing/replacement of CTs,VPIS & its wiring etc ,.Taking out wiring of MOG by fixing of terminal box,fixing of terminal box for CT ratio replacement as per BSES requirement per way (Wires of R,Y,B,Black & Green),thimbles,seleves,wire codes,ties,tie base & other wiring material to be provided by the vendor	EA	
6	Dismantaling/refixing/replacemnt of protection realy ,minor wiring repairing ,refixing/replacement of CTs,VPIS etc , Taking out wiring of MOG by fixing of terminal box,fixing of terminal box for CT ratio replacement(If required) as per BSES requirement per way (Wires of R,Y,B,Black & Green),thimbles,seleves,wire codes,ties,tie base & other wiring material to	EA	

	be provided by the vendor		
7	Stage testing of RMU as per BSES prescribed norms & Protection testing & relay setting as per load by primary injection test per way	EA	
8	Filling of air pressure as per requirement & checking of gas leakage by soap solution /Dip test & monitoring of gas pressure for few days per RMU	EA	
9	Refilling of SF6 gas as per OEM prescribed pressure per RMU ,Sf6 gas to be provided by BSES	EA	
10	Repairing internal fault of RMU per way after recovery of SF6 gas in gas recovery machine ,cutting of tank in any numbers of times , removing internal parts, cleaning of carbon on the parts & tank ,refixing/replacement of all internal parts which includes (vaccum bottles, fixed & moving contacts, backalites, Bus bar, electrical /mechanical bushings ,earthing contacts etc required to remove fault in the tank , rewelding of all cuttings with the SS sheet & making RMU functional in all respect per way.	EA	
11	Repairing internal fault of RMU after recovery of SF6 gas in gas recovery machine ,Opening of tank , refixing/replacement/repair of internal parts which includes (vaccum bottles, fixed & moving contacts, backalites, Bus bar, electrical /mechanical bushings ,earthing contacts etc ,cleaning of carbon on the parts & refixing it after buffing & removing of carbon inside the tank to remove fault in the tank. closing of tank after fixing gaskets with adhesives & making RMU functional in all respect per RMU.	EA	

12	Dismantalling /Refixing of diaphragm for checking the internal view & replacement with new if required other than CGL(Diaphragm to be provided by BSES) per piece	EA	
13	Dismantelling ,listing & submitting of major items like Relay,CTs,Mechanisums,,Diaphragm,Cutting of tank,Tank sheet,Copper bus bars,backalite rods,Contacts,bushings,manometer & all other parts from scrap declared RMU & submitting them to BSES workshop store per way	EA	
14	Repair of old damaged isolator/Breaker mechanism and testing of Mechanism in the presence of workshop staff, after testing handover repaired mechanism to BSES store (spares to be provided by BSES) per piece	EA	
15	Filling up of job work details in job card performa & providing & filling up of test report in a format prescribed by BSES per RMU	EA	
16	Packing of repaired RMU per way with button type polyethylene sheet all around to avoid water ingracing & damaging during transportation per way (packing button type polythelene role & packing material to be provided by the vendor	EA	
17	Paintaing of complete RMU & its allied parts per way as per BSES requiremnts & painting of SAP tag nos after making yellow base painiting (Paint to be provided by the vendor)	EA	
18	Repairing of existing damaged bushing of all make with epoxy compound (Epoxy compound will be provided by vendor as per BSES requirement) per piece	EA	
19	Fixing of silicon sealing on coupling end boxes and insulating of coupling bushing as prescribed by BSES engineers per RMU (Silicone compound to be provided by the vendor)	EA	
20	Fixing of R-Y-B phase, MOG sticker ,Tested okay sticker & earth stickers on each RMU as prescribed by BSES Engineers per RMU (Stickers to be provided by the vendor)	EA	
21	Painting of mechanism ,CTs & seprator set as per requirement with black spray paint , with epoxy paint as per requirement by ISI mark spray paint as per BSES specifications(Paint to be provided by the vendor per piece)	EA	

22	Fixing /refixing of lifting hooks & earth GI strip as required by BSES staff per RMU	EA	
23	Fixing of all types of petty required items for repairing of RMU (Nuts, bolts,washers,spring washers,spring locks,springs,cotton cloth,oils,grease,rubber gasket etc ,adhesive or any other related minor parts/material required will be provided by the vendor) per RMU	EA	
25	Fabrication & supply of MS Frame for 1 way RMU after two coats of ISI make primer & black colour painting	EA	
26	Fabrication & supply of MS Frame for 3 way RMU after two coats of ISI make primer & black colour painting	EA	
27	Fabrication & supply of MS Frame for 4 way RMU after two coats of ISI make primer & black colour painting	EA	
29	M Gerin RM6 Mechnisum Front Cover (2 parts)-4Way	EA	
30	M Gerin RM6 Mechanism Front cover ( 3 way )	EA	
31	M Gerin RM6 Mechanism Front Cover(1 way)	EA	
32	M Gerin RM6 Isolator Cable Compartment top cover-4way/3way	EA	
33	M Gerin RM6 Isolator Cable Compartment cover-4way/3way	EA	
34	M Gerin RM6 Isolator Cable Entry Cover-4way/3way	EA	
35	M Gerin RM6 Breaker cable compatment top cover-4way/3way	EA	
36	M Gerin RM6 Breaker cable compatment cover-4way/3way	EA	
37	M Gerin RM6 Breaker Cable Entry Cover-4way/3way	EA	
38	M Gerin RM6 Cable Compartment Top Cover(1 way)	EA	
39	M Gerin RM6 Cable Compartment Cover(1 way)	EA	
40	M Gerin RM6 Cable Entry Cover (1 way)	EA	
41	M Gerin RM6 Top cover -4 Way	EA	
42	M Gerin RM6 Top cover- 3 Way	EA	
43	M Gerin RM6 Top Cover-1Way	EA	
44	M Gerin RM6 Mechanism Top cover -4 Way	EA	
45	M Gerin RM6 Mechanism Top cover- 3 Way	EA	
46	M Gerin RM6 Mechanism Top Cover-1Way	EA	
47	M Gerin RM6 Lowest Cover ( Front/Back)- 4 way	EA	
48	M Gerin RM6 Lowest Cover ( Front/Back)- 3 way	EA	
49	M Gerin RM6 Lowest Cover ( Front/Back)- 1 way	EA	
50	M Gerin RM6 Lowest Side Cover ( Left/Right)-4way/3way/1way	EA	
51	M Gerin RM6 GI Earthing strip with Hole & bolts-4 way per set	EA	
52	M Gerin RM6 GI Earthing strip with Hole & bolts-3 way per set	EA	
53	M Gerin RM6 GI Earthing strip with Hole & bolts-1 way per set	EA	
54	M Gerin RM6 Coupling End box	EA	
55	M Gerin RM6 coupling bushing flange	EA	
56	M Gerin O/D Breaker Cable compartment Seprator	EA	
57	M Gerin O/D Top Cover ( 3 way)	EA	
58	M Gerin O/D Coupling End Box	EA	
59	M Gerin O/D CT Covering plate /Holding box	EA	
60	M Gerin O/D Cable compartment cover (left/right side)	EA	

61	M Gerin O/D Back side Cable compartment	EA	
62	M Gerin O/D Breaker Mechanism Cover(BMC)	EA	
63	M Gerin O/D Front side Cover faccia	EA	
64	M Gerin O/D Isolator Cable Entry Cover(Left/right)	EA	
65	M Gerin O/D Breaker Cable Entry Cover	EA	
66	M Gerin O/D NRV side cover	EA	
67	M Gerin O/D Base frame	EA	
68	M Gerin O/D bushing holding plate (Isolater/breaker)	EA	
69	M Gerin O/D earthing strip-3way/1way per set	EA	
70	ABB Isolator Mechanism Cover (Manometer)	EA	
71	ABB Isolator Mechanism cover	EA	
72	ABB Breaker Mechanism Cover	EA	
73	ABB Isolator lower Cover (Plain)	EA	
74	ABB ID Cable Compartment Cover (Isolator/Breaker)	EA	
75	ABB ID Cable Entry Cover (Two part) (Isolator/Breaker)-ALL TYPE- 4way/3way/1way	EA	
76	ABB ID Topcover / Lowest Front cover / Lowest Backside Cover -1 way	EA	
77	ABB ID Topcover / Lowest Front cover / Lowest Backside Cover-3 way	EA	
78	ABB ID Topcover / Lowest Front cover / Lowest Backside Cover -4 way	EA	
79	ABB Lowest Side Cover ( 1Way/3Way/4Way)	EA	
80	ABB ID Mechanism Cover Holding E type channel - Aluminum - 4way	EA	
81	ABB ID Mechanism Cover Holding E type channel - Aluminum - 3way	EA	
82	ABB ID Mechanism Cover Holding E type channel - Aluminum - 1way	EA	
83	ABB Coupling end Box	EA	
84	ABB ID Earthing Strip-4way per set	EA	
85	ABB ID Earthing Strip-3way per set	EA	
86	ABB ID Earthing Strip-1way per set	EA	
87	ABB Cable Compartment Cover Holding frame ( Front and bottom both )	EA	
88	CT Mounting Plate- To be common in ABB/CGL ID/AREVA	EA	
89	ABB Cable compartment top cover-4way	EA	
90	ABB Cable compartment top cover-3way	EA	
91	ABB Cable compartment top cover-1way	EA	
92	ABB ID Diaphragm sheet per way	EA	
93	ABB ID Mechanical on/off/earth indication -Round shape	EA	
94	ABB O/D Isolater Cable Compartment Cover(Left/Right)	EA	
95	ABB O/D Breaker Cable compartment cover		
96	ABB O/D Top Cover ( 3way)	EA	
97	ABB O/D Top Cover ( 1way)	EA	
98	ABB O/D Breaker Mechanism Cover	EA	

99	ABB O/D Isolater Mechanism Cover(Left/Right)	EA	
100	ABB O/D Front Mimic Cover-3way	EA	
101	ABB O/D Front Mimic Cover-1way	EA	
102	ABB O/D Earthing strip -3way/1way per set	EA	
103	ABB O/D Coupling End box	EA	
104	CGL O/D Breaker Mechanism Cover	EA	
105	CGL O/D Top Cover	EA	
106	CGL O/D Cable Compartment Cover (Small length/Long length/old/new type)	EA	
107	Cable O/D Compartment Cover (New/Long length)	EA	
108	CGL O/D Cable Entry Cover (Isolator & breaker)	EA	
109	CGL O/D Cable Entry Cover (Breaker New)	EA	
110	CGL O/D Coupling Cover	EA	
111	CGL O/D Coupling end box.	EA	
112	CGL O/D Coupling cover mounting base plate (Aluminum)	EA	
113	CGL O/D Earth & Test Plate	EA	
114	Providing of Reset strip of CGL make	EA	
115	CGL O/D Coupling end box mounting frame	EA	
116	CGL O/D Earthing strip-3way/1way per set	EA	
117	CGL O/D Cable compartment holding cover	EA	
118	CGL I/D Cable Compartment Cover	EA	
119	CGL I/D Cable Entry Cover	EA	
120	CGL I/D Top Cover	EA	
121	CGL I/D Back Side Cover	EA	
122	CGL I/D CT holding Separator with fixing studs (complete set)	EA	
123	CGL I/D Earthing strip-4Way per set	EA	
124	CGL I/D Earthing strip-3Way per set	EA	
125	CGL I/D Earthing strip-1Way per set	EA	
126	Schneider ( FBX Model) Breaker/Isolater Cable Compartment Cover	EA	
127	AREVA Cable Compartment Cover	EA	
128	AREVA Cable Entry Cover	EA	
129	AREVA Breaker mechanism cover	EA	
130	AREVA Isolater mechanism cover	EA	
131	AREVA Plain Cover for Breaker/Isolator	EA	
132	AREVA Lowest front/Back cover-4way	EA	
133	AREVA Lowest front/Back cover-3way	EA	
134	AREVA Lowest front/Back cover-1way	EA	
135	AREVA Lowest Side cover-4 way/3 way/1 way	EA	
136	AREWA Top Cover(4way)	EA	
137	AREWA Top Cover(3way)	EA	
138	AREWA Top Cover(1way)	EA	
139	AREWA front top cover ( Manometer & VPIS & FPI Cutting ) - 4 way	EA	



140	AREWA front top cover ( Manometer & VPIS & FPI Cutting ) - 3 way	EA	
141	AREWA front top cover ( Manometer & VPIS & FPI Cutting ) - 1 way	EA	
142	ARIVA upper tank support(Left/right)	EA	
143	ARIVA mechanism cover holding frame per way	EA	
144	ARIVA Earthing strip-4Way per set	EA	
145	ARIVA Earthing strip-3Way per set	EA	
146	ARIVA Earthing strip-1Way per set	EA	
147	AREVA Coupling End Box	EA	
148	Compartment Partition (INDOOR)	EA	
149	C&S O/D Isolater Cable compartment cover(Left/Right)	EA	
150			
151	C&S O/D Breaker Cable compartment cover	EA	
152	C&S O/D Top Cover ( 3way)	EA	
153	C&S O/D Top Cover ( 1way)	EA	
154	C&S O/D Terminal Box door/cover	EA	
155	C&S O/D Cable Entry Cover(Isolater/Breaker)	EA	
156	C&S O/D Earthing strip-3way/1way per set	EA	
157	C&S O/D Coupling End box	EA	
158	C&S I/D Cable compartment cover(Isolater/Breaker)	EA	
159	C&S I/D Cable Entry Cover(Isolater/Breaker)	EA	
160	C&S I/D front faccia cover	EA	
161	C&S ID Top/ Lowest Front/Backside Cover/front top cover -4 way	EA	
162	C&S ID Top/Lowest Front/Backside Cover/front top cover-3 way	EA	
163	C&S ID Top/Lowest Front/Backside Cover/front top cover -1 way	EA	
164	C&S ID Earthing Strip-4way per set	EA	
165	C&S ID Earthing Strip-3way per set	EA	
166	C&S ID Earthing Strip-1way per set	EA	
167	C&S ID Coupling End box	EA	
168	SIEMENS Cable Compartment Cover Breaker/Isolater	EA	
169	SIEMENS Isolater Mechanism Cover	EA	
170	SIEMENS Breaker Mechansim Cover	EA	
171	SIEMENS Front Cover	EA	
172	SIEMENS Lowest Side cover	EA	
173	SIEMENS Cable entry cover (Breaker/Isolater)	EA	
174	SIEMENS top cover - 4 way	EA	
175	SIEMENS top cover - 3 way	EA	
176	SIEMENS top cover - 1 way	EA	
177	SIEMENS Earthing strip - 4 way per set	EA	
178	SIEMENS Earthing strip - 3 way per set	EA	
179	SIEMENS Earthing strip - 1 way per set	EA	
180	SIEMENS Coupling end box	EA	
181	Providing of Metal box for taking terminal of MOG/Marshellen box etc.	EA	

182	Providing of CT of all make & ratio as per requirement as per BSES specifications	EA	
183	Providing of Battery in all make RMU protection relay	EA	
185	Providing of S.S Nut with washer in all repaired RMU.	EA	
186	Providing o Brass Nut with washer in all repaired RMU.	EA	
187	Providing of VPIS along with supply of required all spare parts	EA	
188	Compartment Partition (INDOOR)	EA	
189	RMU Lifting Clamp (All Make/Size/Shape) in Nos.	EA	
190	Providing tank mounting side sheets to keep RMU erect common in all make RMU	EA	
191	Lifting hook holding Strip	EA	
192	Providing of wooden cleat with MS bolt as per BSES specification as per BSES specifications	EA	
193	Providing of C-type-Clamp with MS bolt as per BSES specification as per BSES specifications	EA	
194	Providing of Cleat holding cover/plate with MS bolt as per BSES specification as per BSES specifications	EA	
195	Providing of Cleat holding strip (U-shape or flat strip or as per requirement) as per BSES specification	EA	
196	Providing of Cleat holding channel with fixing attachment as per BSES specification -4way RMU	EA	
197	Providing of Cleat holding channel with fixing attachment as per BSES specification -3way RMU	EA	
198	Providing of Cleat holding channel with fixing attachment as per BSES specification -1way RMU	EA	
199	VPIS Frame-All type-All make as per BSES specification	EA	
200	Providing of relay mounting frame per piece (All type & all make as per BSES specification and requirement)	EA	
201	Providing of new Transformer 220/24V AC and rectifier unit as per requirement & as per BSES specifications and requirements	EA	
202	Providing & fixing of Silicon sheet by vendor per piece (for CGL make RMU) as per BSES specification (Activity +material)	EA	
203	Providing of phase seprator as per BSES specification & requirement.	EA	
204	Providing of Nylon coupling bushing cap as per BSES specification & requirement.	EA	
205	Providing of stainless Steel Sheet 304 grade standard make (Jindal)of 2.5/3mm as per OEM design & BSES requirement.	KG	
206	Transportation of material from workshop to store or from store to store by half body truck/LMV vehicle by providing of labour for loading unloading of material for 8 hrs	Per Trip	

**a) Activity RMU on site**

S.No.	Material/Service description	Unit	Proposed Rates(inclusive of all taxes except GST)
1	Cleaning,Opening, Making safety zone after discharging cables & connecting shorting clamps, Minor repairs which includes making adjustments in settings of breaker,Isolator,Earth switch,protection relay settings,trip coil,Reset strip,Covers,push button. Making connection of RMU earthng /RMU cable earth ,Checking ON/OFF operation Isolator/Breaker/Earth switch & making the RMU operational at site.Petty item like screws/nut bolts/Washers,spring lock, small wires etc are included in this job will be provided at site by the contractor) per RMU	EA	
2	Protection testing & relay setting as per load by primary injection in a breaker compartment set per way	EA	
3	Dismanteling/Refixing/Replacement of Relay by providing fixing plate if required) per way	EA	
4	Repairing/Rewiring of CT ,Relay & other electrical items in RMU including wiring materials, wires & thimbels etc will be provided by the contractor per way	EA	
5	Checking of SF6 gas leakage with sniffer/soap solution after removing covers,all Mechanism etc as per requirement per RMU	EA	
6	Refilling of SF6 gas upto the OEM prescribed value after doing vaccum as per requirement at site per RMU	EA	
7	Dismanteling/Reinstallation/Replacement of faulty Breaker/Isolator/Interlocking Mechanism per way	EA	
8	Replacement/Dismantelling/Refixing of CT in all make RMU per CT	EA	
9	Repairing/Replacement of VPIS set of all make RMU (per way)	EA	
10	Repair of old damaged isolator/Breaker mechanisum & handover repaired mechanism to BSES store after certifyingit from BSES staff (spares to be provided by BSES)		
11	Taking of photographs before start of work , photographs after completing the work & uploading in the system( In Soft) per photo)	EA	

12	Declaring RMU not repairable at site after carrying out PC test ,Insulation test , Mechanism operation test and gas leakage testing etc per RMU	EA	
13	Removing , refixing the cable , opening all cable connections from the cable compartment ,cleaning of bushing , tightening with OEM specified torque with torque wrench after fixing boots or 3 layer tapes (Ensure no pressure on bushing) per way	EA	
14	Cleaning of flashed compartment & removing carbon from bushing. Carryout PC test after making 3 layers coating of anti tracking paint on the bushing of each compartment	EA	
15	Coating of anti tracking paint on bushing in one set of compartment (anti tracking paint will be provided by BSES)	EA	
16	Replacement of manometer in all make RMU per RMU	EA	
17	Replacement of trip coil per way	EA	
18	Replacement of Push button assembly arrangement & its accessories (Z strip liver,push button plate ,handle operating socket etc)Material will be provided by the BSES per way	EA	
19	Replacement of bushing (ABB Make) per piece	EA	
20	Removing melted stud from bushing & creating thread inside the bushing by tap handle & making RMU operational	EA	
21	Providing of S.S/Brass Nut with washer in all repaired RMU per piece	EA	
22	Providing & replacement of Battery in all make RMU protection relay per relay	EA	
23	Providing of Reset strip of CGL make per piece	EA	
24	Providing & fixing of cleats for all make RMU( C-clamp/wooden cleats + Cleat supporting ) per piece	EA	
25	Providing of Sumo for 8 Hrs (Commercial Vehicle)	per trip	

**c) a) Activity ACB Repair**

Sr No	Material/Service description	Rates (inclusive of all taxes except GST)			
		400A	800A	1250A	2000A
1	Lifting of faulty ACB from store ,Cleaning with air blower / cotton cloth ,Carrying out complete electrical & mechanical initial testing on ACB which includes,Physical ON/OFF,continuity & High voltage PC test by vendor staff in the presence of BSES staff, . washing with high pressure jet pump after unassembling all parts like Bus bars,phase seperators, mechanisum, Relay,CTs etc from the enclosure				

2	Repairing of faulty mechanism of ACB which includes unassembling/reassembling/replacement of faulty component in the breaker mechanism any number of times ,making all adjustments in mechanism till the proper working of ON/OFF operation of ACB ,setting of ON/OFF push buttons,springs etc are obtained				
3	Refixing/replacemnt of protection realy,CTs after making adjustments in the body or by fixing frame( if required) ,carrying out new wiring , etc as per BSES requirement				
4	Repairing the ACB body for all damages & covers, Painting of complete ACB & its allied parts as per BSES requiremnts & painting of SAP tag nos after making yellow base painting per ACB (paint to be provided by the vendor)				
5	Reassembling of all parts in ACB enclosure ,refixing/replacement of bus bars as per its rating & design as prescribed by BSES ,fixing of phase seprators, protective sheet etc, welding of mechanism, neutral Bus bar /CT arrangement				
6	Insulation of incoming & outgoing aluminium bus bars with heat shrinkable sleeves (R,Y,B & N colour) per piece as per BSES specifications (sleves to be provided by the vendor)				
7	Complete testing & its certification from graduate/qualified Engineer which includes Insulation test ,Impression test,ON-OFF operation test & filling up of results in test report format of BSES and tagging it at a place prescribed by the BSES				
8	Transportation of material from workshop to store or from store to store by half body truck by providing of labour for loading unloading of material for 8 Hrs				

9	Dismanteling of major items from unrepairable/scrap ACB,like mechanism,copper contacts,Aluminium Bus bars,Arc chutes,Relays,Trip coil,CTs,Front and top cover & deposit of usable items in workshop store & returning of unusable items in scrap store as per directions of BSES staff				
10	Repairing of old faulty rectifier of ACB per piece				
11	Fixing & providing of all types of petty items nuts, bolts,washers,spring washers,spring locks,springs,cotton cloth,oils,grease,rubber gasket etc ,adhesive or any other related minor parts/material required in the repairing work per ACB				
12	Providing of CTs after Repairing/rewinding of old faulty CT per piece s per BSES specifications (faulty CTs to be provided by the BSES)				
13	Providing of Aluminium Bus Bar per piece as per OEM design & BSES specifications				
14	Applying of silicone sealing in ACB as per BSES specifications (silicone seling compond to be provided by the vendor)				
15	Fixing of trip coil & its arrangment of tripping in all make ACBs wherever reqd				
16	Packing of repaired ACB with button type polyethlene sheet all arround to avoid water ingressing & damaging during transportation				
17	Painting of mechanism/arc chute pole assembly/pole assembly separator of ACB by spray paint as per BSES specifications(Paint to be provided by the vendor)				
18	Fixing & providing of cover holding arrangement per piece as per BSES specification				
19	On site repair of ACB by carrying out complete repair which includes mechanical repairing ,electrical repairing ,replacement of faulty parts, repair/replacement of wiring,change of CTs & replacement of microprocessor relay & testing of protection circuit by prmary or secondary testing at site thus making ACB fully operational at site				
20	Providing of insulator per piece as per requirement & as per BSES specifications				
21	Providing of bus Bar Separator in ACB FRP (Glass Fibre) per set as per BSES specifications				

22	Providing of cover per piece as per BSES specification				
23	Providing of Arc Chute per piece as per BSES specifications				
24	Providing of pole separator per piece in ACB per piece as per BSES specifications				
25	Providing of relay cover ACB as per BSES specification				
26	Providing of thermal relay per ACB as per requirement & as per BSES specifications				
27	Providing of adaptor kit for thermal relay per ACB as per BSES specifications				
28	Providing of stand for fixing thermal relay in ACB per piece as per BSES design & specifications				
29	Providing of trip coil as per required make of ACB & as per BSES specifications per piece				
30	Providing of protective sheet after painting with ISI mark primer & two coats of ISI mark paint or zinc make & making arrangement of air releasing arrangement duly sealed with silicone as per BSES requirement & specifications per ACB				
31	Providing of new CT per piece of all make & all ratio as per requirement & as per BSES specifications per piece				
32	Providing of trip coil fixing arrangement per set as per BSES specifications				
33	Providing of pole assembly separator per set (two Pieces) in ACB as per BSES specifications				
34	Providing of insulating pipe per piece as per BSES specifications				
35	Providing of relay cover in ACB per piece as per requirement & as per BSES specifications				
36	Providing of CT Supporter per piece as per BSES specifications				
37	Providing of plug in socket per piece for SR15G or SR 18G type relay according to BSES specifications				
38	Providing of new auxiliary contact (2 NO+2NC) or making microswitch arrangement for disconnecting supply to trip coil per piece				
39	Providing of new rectifier per piece as per requirement & as per BSES specifications				

40	Providing of ON/OFF Push Button per Piece as per BSES Specifications				
41	Providing of Trip Mechanism Cover per piece				
42	Providing of "ON/OFF or Tripped " indicator lamps (Micro switch,On/OFF indicator & another related material to be provided by vendor) after making arrangement of fixing by cutting on the cover/protective sheet by completing its wiring with proper thimbles per ACB				
43	Providing & Fixing of "ON/OFF or Tripped " indicator lamps & providing extension of ON/OFF contacts to terminal plate (Terminal plate ,Micro switch,On/OFF indicator& other related material to be provided by vendor) after making arrangement of fixing by cutting on the cover/protective sheet by completing its wiring with proper thimbles per ACB				
44	Providing of phase separator per piece in ACB with FRP sheet (Glass Fibre) as per BSES specifications				

GST at actual shall be paid extra on the above quoted rate.



## ESTIMATED QUANTITY

### a) Activity RMU in house

S.No.	Proposed Scope of work	UOM	Expected QUANTITY FOR 2 yr
1	Lifting of faulty RMU from store ,Cleaning with air blower / cotton cloth ,Carrying out complete electrical & mechanical intial testing on RMU which includes,Contact Restance testing,Contnuity test & High voltage PC test by vendor staff in the presence of BSES staff, . washing with high pressure jet pump after removing all covers & electrical parts like Relay,CTs ,FPIs etc per way (Crane for lifting will be provided by the BSES)	EA	240
2	Completing the cable holding compartment in all repect by refixing existing cleats/fixing missing wooden cleats ,c clamps, U shape strip & other cleat hoding arrangement as per requirement per way	EA	400
3	PDI inspection & its certification from graduate /technical qualified Er which includes Relay functioning test by primary injection,FPI & VPIS working,PC Test,CRM test,Continuity test , checking of SF6 gas staus ,Inter locking ,Mechanically oeration test of Isolator,breaker & Earth switch,status of Earthing busbar, Cover placement etc per RMU	EA	240
4	Repairing of RMU for all types of external mechanical fault & activities which includes refixing/replacement/repair in breaker /isolator/interlocking/earth mechanisum,manometer,trip coils,tripper ,reset strip,firing link rod,push button, hand operating socket,Z shape liver,On/Off indications,covers,partions,supports, frame, allignments & making RMU fully operational externally per way	EA	340
5	Dismantaling/refixing/replacemnt of protection realy ,repairing/Replacement of wiring ,refixing/replacement of CTs,VPIS & its wiring etc ,.Taking out wiring of MOG by fixing of terminal box,fixing of terminal box for CT ratio replacement as per BSES requirement per way (Wires of R,Y,B,Black & Green),thimbles,seleves,wire codes,ties,tie base & other wiring material to be provided by the vendor	EA	340
6	Dismantaling/refixing/replacemnt of protection realy ,minor wiring repairing ,refixing/replacement of CTs,VPIS etc , Taking out wiring of MOG by fixing of terminal box,fixing of terminal box for CT ratio replacement(If required) as per BSES requirement per way (Wires of R,Y,B,Black & Green),thimbles,seleves,wire codes,ties,tie base & other wiring material to be provided by the vendor	EA	224

7	Stage testing of RMU as per BSES prescribed norms & Protection testing & relay setting as per load by primary injection test per way	EA	224
8	Filling of air pressure as per requirement & checking of gas leakage by soap solution /Dip test & monitoring of gas pressure for few days per RMU	EA	140
9	Refilling of SF6 gas as per OEM prescribed pressure per RMU ,Sf6 gas to be provided by BSES	EA	228
10	Repairing internal fault of RMU per way after recovery of SF6 gas in gas recovery machine ,cutting of tank in any numbers of times , removing internal parts, cleaning of carbon on the parts & tank ,refixing/replacement of all internal parts which includes (vaccum bottles, fixed & moving contacts, backalites, Bus bar, electrical /mechanical bushings ,earthing contacts etc required to remove fault in the tank , rewelding of all cuttings with the SS sheet & making RMU functional in all respect per way.	EA	140
11	Repairing internal fault of RMU after recovery of SF6 gas in gas recovery machine ,Opening of tank , refixing/replacement/repair of internal parts which includes (vaccum bottles, fixed & moving contacts, backalites, Bus bar, electrical /mechanical bushings ,earthing contacts etc ,cleaning of carbon on the parts & refixing it after buffing & removing of carbon inside the tank to remove fault in the tank. closing of tank after fixing gaskets with adhesives & making RMU functional in all respect per RMU.	EA	160

12	Dismantalling /Refixing of diaphragm for checking the internal view & replacement with new if required other than CGL(Diaphragm to be provided by BSES) per piece	EA	180
13	Dismantelling ,listing & submitting of major items like Relay,CTs,Mechanisms,,Diaphragm,Cutting of tank,Tank sheet,Copper bus bars,backalite rods,Contacts,bushings,manometer & all other parts from scrap declared RMU & submitting them to BSES workshop store per way	EA	80
14	Repair of old damaged isolator/Breaker mechanism and testing of Mechanism in the presence of workshop staff, after testing handover repaired mechanism to BSES store (spares to be provided by BSES) per piece	EA	48
15	Filling up of job work details in job card performa & providing & filling up of test report in a format prescribed by BSES per RMU	EA	240
16	Packing of repaired RMU per way with button type polyethylene sheet all around to avoid water ingracing & damaging during transportation per way (packing button type polythelene role & packing material to be provided by the vendor	EA	782
17	Paintaing of complete RMU & its allied parts per way as per BSES requiremnts & painting of SAP tag nos after making yellow base painiting (Paint to be provided by the vendor)	EA	782
18	Repairing of existing damaged bushing of all make with epoxy compound (Epoxy compound will be provided by vendor as per BSES requirement) per piece	EA	60
19	Fixing of silicon sealing on coupling end boxes and insulating of coupling bushing as prescribed by BSES engineers per RMU (Silicone compound to be provided by the vendor)	EA	240
20	Fixing of R-Y-B phase, MOG sticker ,Tested okay sticker & earth stickers on each RMU as prescribed by BSES Engineers per RMU (Stickers to be provided by the vendor)	EA	240
21	Painting of mechanism ,CTs & seprator set as per requirement with black spray paint , with epoxy paint as per requirement by ISI mark spray paint as per BSES specifications(Paint to be provided by the vendor per piece)	EA	40
22	Fixing /refixing of lifting hooks & earth GI strip as required by BSES staff per RMU	EA	240

23	Fixing of all types of petty required items for repairing of RMU (Nuts, bolts,washers,spring washers,spring locks,springs,cotton cloth,oils,grease,rubber gasket etc ,adhesive or any other related minor parts/material required will be provided by the vendor) per RMU	EA	240
25	Fabrication & supply of MS Frame for 1 way RMU after two coats of ISI make primer & black colour painting	EA	10
26	Fabrication & supply of MS Frame for 3 way RMU after two coats of ISI make primer & black colour painting	EA	10
27	Fabrication & supply of MS Frame for 4 way RMU after two coats of ISI make primer & black colour painting	EA	10
29	M Gerin RM6 Mechnisum Front Cover (2 parts)-4Way	EA	10
30	M Gerin RM6 Mechanism Front cover ( 3 way )	EA	20
31	M Gerin RM6 Mechanism Front Cover(1 way)	EA	10
32	M Gerin RM6 Isolator Cable Compartment top cover-4way/3way	EA	60
33	M Gerin RM6 Isolator Cable Compartment cover-4way/3way	EA	40
34	M Gerin RM6 Isolator Cable Entry Cover-4way/3way	EA	60
35	M Gerin RM6 Breaker cable compatment top cover-4way/3way	EA	60
36	M Gerin RM6 Breaker cable compatment cover-4way/3way	EA	60
37	M Gerin RM6 Breaker Cable Entry Cover-4way/3way	EA	50
38	M Gerin RM6 Cable Compartment Top Cover(1 way)	EA	10
39	M Gerin RM6 Cable Compartment Cover(1 way)	EA	10
40	M Gerin RM6 Cable Entry Cover (1 way)	EA	10
41	M Gerin RM6 Top cover -4 Way	EA	50
42	M Gerin RM6 Top cover- 3 Way	EA	20
43	M Gerin RM6 Top Cover-1Way	EA	10
44	M Gerin RM6 Mechanism Top cover -4 Way	EA	10
45	M Gerin RM6 Mechanism Top cover- 3 Way	EA	10
46	M Gerin RM6 Mechanism Top Cover-1Way	EA	10
47	M Gerin RM6 Lowest Cover ( Front/Back)- 4 way	EA	80
48	M Gerin RM6 Lowest Cover ( Front/Back)- 3 way	EA	60
49	M Gerin RM6 Lowest Cover ( Front/Back)- 1 way	EA	20
50	M Gerin RM6 Lowest Side Cover ( Left/Right)-4way/3way/1way	EA	20
51	M Gerin RM6 GI Earthing strip with Hole & bolts-4 way per set	EA	60
52	M Gerin RM6 GI Earthing strip with Hole & bolts-3 way per set	EA	20
53	M Gerin RM6 GI Earthing strip with Hole & bolts-1 way per set	EA	10
54	M Gerin RM6 Coupling End box	EA	20
55	M Gerin RM6 coupling bushing flange	EA	20
56	M Gerin O/D Breaker Cable compartment Seprator	EA	10
57	M Gerin O/D Top Cover ( 3 way)	EA	20
58	M Gerin O/D Coupling End Box	EA	10
59	M Gerin O/D CT Covering plate /Holding box	EA	10
60	M Gerin O/D Cable compartment cover (left/right side)	EA	10
61			

62	M Gerin O/D Breaker Mechanism Cover(BMC)	EA	20
63	M Gerin O/D Front side Cover faccia	EA	10
64	M Gerin O/D Isolator Cable Entry Cover(Left/right)	EA	8
65	M Gerin O/D Breaker Cable Entry Cover	EA	20
66	M Gerin O/D NRV side cover	EA	10
67	M Gerin O/D Base frame	EA	10
68	M Gerin O/D bushing holding plate (Isolater/breaker)	EA	10
69	M Gerin O/D earthing strip-3way/1way per set	EA	30
70	ABB Isolator Mechanism Cover (Manometer)	EA	80
71	ABB Isolator Mechanism cover	EA	90
72	ABB Breaker Mechanism Cover	EA	80
73	ABB Isolator lower Cover (Plain)	EA	90
74	ABB ID Cable Compartment Cover (Isolator/Breaker)	EA	84
75	ABB ID Cable Entry Cover (Two part) (Isolator/Breaker)-ALL TYPE- 4way/3way/1way	EA	92
76	ABB ID Topcover / Lowest Front cover / Lowest Backside Cover -1 way	EA	20
77	ABB ID Topcover / Lowest Front cover / Lowest Backside Cover-3 way	EA	30
78	ABB ID Topcover / Lowest Front cover / Lowest Backside Cover -4 way	EA	40
79	ABB Lowest Side Cover ( 1Way/3Way/4Way)	EA	50
80	ABB ID Mechanism Cover Holding E type channel - Aluminum - 4way	EA	20
81	ABB ID Mechanism Cover Holding E type channel - Aluminum - 3way	EA	10
82	ABB ID Mechanism Cover Holding E type channel - Aluminum - 1way	EA	8
83	ABB Coupling end Box	EA	20
84	ABB ID Earthing Strip-4way per set	EA	40
85	ABB ID Earthing Strip-3way per set	EA	20
86	ABB ID Earthing Strip-1way per set	EA	10
87	ABB Cable Compartment Cover Holding frame ( Front and bottom both )	EA	30
88	CT Mounting Plate- To be common in ABB/CGL ID/AREVA	EA	50
89	ABB Cable compartment top cover-4way	EA	20
90	ABB Cable compartment top cover-3way	EA	30
91	ABB Cable compartment top cover-1way	EA	50
92	ABB ID Diaphragm sheet per way	EA	4
93	ABB ID Mechanical on/off/earth indication -Round shape	EA	20
94	ABB O/D Isolater Cable Compartment Cover(Left/Right)	EA	10
95	ABB O/D Breaker Cable compartment cover		10
96	ABB O/D Top Cover ( 3way)	EA	10
97	ABB O/D Top Cover ( 1way)	EA	10
98	ABB O/D Breaker Mechanism Cover	EA	10
99	ABB O/D Isolater Mechanism Cover(Left/Right)	EA	10
100	ABB O/D Front Mimic Cover-3way	EA	10

101	ABB O/D Front Mimic Cover-1way	EA	10
102	ABB O/D Earthing strip -3way/1way per set	EA	10
103	ABB O/D Coupling End box	EA	10
104	CGL O/D Breaker Mechanism Cover	EA	30
105	CGL O/D Top Cover	EA	4
106	CGL O/D Cable Compartment Cover (Small length/Long length/old/new type)	EA	100
107	Cable O/D Compartment Cover (New/Long length)	EA	80
108	CGL O/D Cable Entry Cover (Isolator & breaker)	EA	90
109	CGL O/D Cable Entry Cover (Breaker New)	EA	20
110	CGL O/D Coupling Cover	EA	50
111	CGL O/D Coupling end box.	EA	44
112	CGL O/D Coupling cover mounting base plate (Aluminum)	EA	30
113	CGL O/D Earth & Test Plate	EA	16
114	Providing of Reset strip of CGL make	EA	100
115	CGL O/D Coupling end box mounting frame	EA	50
116	CGL O/D Earthing strip-3way/1way per set	EA	50
117	CGL O/D Cable compartment holding cover	EA	20
118	CGL I/D Cable Compartment Cover	EA	12
119	CGL I/D Cable Entry Cover	EA	48
120	CGL I/D Top Cover	EA	4
121	CGL I/D Back Side Cover	EA	30
122	CGL I/D CT holding Separator with fixing studs (complete set)	EA	32
123	CGL I/D Earthing strip-4Way per set	EA	20
124	CGL I/D Earthing strip-3Way per set	EA	10
125	CGL I/D Earthing strip-1Way per set	EA	4
126	Schneider ( FBX Model) Breaker/Isolater Cable Compartment Cover	EA	16
127	AREVA Cable Compartment Cover	EA	30
128	AREVA Cable Entry Cover	EA	60
129	AREVA Breaker mechanism cover	EA	30
130	AREVA Isolater mechanism cover	EA	20
131	AREVA Plain Cover for Breaker/Isolator	EA	26
132	AREVA Lowest front/Back cover-4way	EA	30
133	AREVA Lowest front/Back cover-3way	EA	20
134	AREVA Lowest front/Back cover-1way	EA	10
135	AREVA Lowest Side cover-4 way/3 way/1 way	EA	30
136	AREWA Top Cover(4way)	EA	32
137	AREWA Top Cover(3way)	EA	20
138	AREWA Top Cover(1way)	EA	16
139	AREWA front top cover ( Manometer & VPIS & FPI Cutting ) - 4 way	EA	10
140	AREWA front top cover ( Manometer & VPIS & FPI Cutting ) - 3 way	EA	10
141	AREWA front top cover ( Manometer & VPIS & FPI Cutting ) - 1 way	EA	10

142	ARIVA upper tank support(Left/right)	EA	20
143	ARIVA mechanism cover holding frame per way	EA	30
144	ARIVA Earthing strip-4Way per set	EA	50
145	ARIVA Earthing strip-3Way per set	EA	30
146	ARIVA Earthing strip-1Way per set	EA	10
147	AREVA Coupling End Box	EA	10
148	Compartment Partition (INDOOR)	EA	70
149	C&S O/D Isolater Cable compartment cover(Left/Right)	EA	10
150			
151	C&S O/D Breaker Cable compartment cover	EA	10
152	C&S O/D Top Cover ( 3way)	EA	10
153	C&S O/D Top Cover ( 1way)	EA	8
154	C&S O/D Terminal Box door/cover	EA	4
155	C&S O/D Cable Entry Cover(Isolater/Breaker)	EA	20
156	C&S O/D Earthing strip-3way/1way per set	EA	30
157	C&S O/D Coupling End box	EA	4
158	C&S I/D Cable compartment cover(Isolater/Breaker)	EA	10
			0
159	C&S I/D Cable Entry Cover(Isolater/Breaker)	EA	10
160	C&S I/D front faccia cover	EA	2
161	C&S ID Top/ Lowest Front/Backside Cover/front top cover -4 way	EA	8
162	C&S ID Top/Lowest Front/Backside Cover/front top cover-3 way	EA	10
163	C&S ID Top/Lowest Front/Backside Cover/front top cover -1 way	EA	8
164	C&S ID Earthing Strip-4way per set	EA	8
165	C&S ID Earthing Strip-3way per set	EA	4
166	C&S ID Earthing Strip-1way per set	EA	2
167	C&S ID Coupling End box	EA	10
168	SIEMENS Cable Compartment Cover Breaker/Isolater	EA	10
169	SIEMENS Isolater Mechanism Cover	EA	4
170	SIEMENS Breaker Mechansim Cover	EA	8
171	SIEMENS Front Cover	EA	6
172	SIEMENS Lowest Side cover	EA	4
173	SIEMENS Cable entry cover (Breaker/Isolater)	EA	20
174	SIEMENS top cover - 4 way	EA	10
175	SIEMENS top cover - 3 way	EA	10
176	SIEMENS top cover - 1 way	EA	8
177	SIEMENS Earthing strip - 4 way per set	EA	6
178	SIEMENS Earthing strip - 3 way per set	EA	4
179	SIEMENS Earthing strip - 1 way per set	EA	4
180	SIEMENS Coupling end box	EA	6
181	Providing of Metal box for taking terminal of MOG/Marshellen box etc.	EA	400
182	Providing of CT of all make & ratio as per requirement as per BSES specifications	EA	500

183	Providing of Battery in all make RMU protection relay	EA	400
185	Providing of S.S Nut with washer in all repaired RMU.	EA	600
186	Providing o Brass Nut with washer in all repaired RMU.	EA	1600
187	Providing of VPIS along with supply of required all spare parts	EA	400
188	Compartment Partition (INDOOR)	EA	30
189	RMU Lifting Clamp (All Make/Size/Shape) in Nos.	EA	480
190	Providing tank mounting side sheets to keep RMU erect common in all make RMU	EA	10
191	Lifting hook holding Strip	EA	40
192	Providing of wooden cleat with MS bolt as per BSES specification as per BSES specifications	EA	400
193	Providing of C-type-Clamp with MS bolt as per BSES specification as per BSES specifications	EA	380
194	Providing of Cleat holding cover/plate with MS bolt as per BSES specification as per BSES specifications	EA	200
195	Providing of Cleat holding strip (U-shape or flat strip or as per requirement) as per BSES specification	EA	300
196	Providing of Cleat holding channel with fixing attachment as per BSES specification -4way RMU	EA	300
197	Providing of Cleat holding channel with fixing attachment as per BSES specification -3way RMU	EA	180
198	Providing of Cleat holding channel with fixing attachment as per BSES specification -1way RMU	EA	120
199	VPIS Frame-All type-All make as per BSES specification	EA	400
200	Providing of relay mounting frame per piece (All type & all make as per BSES specification and requirement)	EA	200
201	Providing of new Transformer 220/24V AC and rectifier unit as per requirement & as per BSES specifications and requirements	EA	20
202	Providing & fixing of Silicon sheet by vendor per piece (for CGL make RMU) as per BSES specification (Activity +material)	EA	30
203	Providing of phase separator as per BSES specification & requirement.	EA	20
204	Providing of Nylon coupling bushing cap as per BSES specification & requirement.	EA	30
205	Providing of stainless Steel Sheet 304 grade standard make (Jindal)of 2.5/3mm as per OEM design & BSES requirement.	KG	400
206	Transportation of material from workshop to store or from store to store by half body truck/LMV vehicle by providing of labour for loading unloading of material for 8 hrs	Per Trip	20



**b) Activity RMU on site**

<b>S.No.</b>	<b>Material/Service description</b>	<b>Unit</b>	<b>Expected QUANTITY FOR 2 yr</b>
1	Cleaning,Opening, Making safety zone after discharging cables & connecting shorting clamps, Minor repairs which includes making adjustments in settings of breaker,Isolator,Earth switch,protection relay settings,trip coil,Reset strip,Covers,push button. Making connection of RMU earthing /RMU cable earth ,Checking ON/OFF operation Isolator/Breaker/Earth switch & making the RMU operational at site.Petty item like screws/nut bolts/Washers,spring lock, small wires etc are included in this job will be provided at site by the contractor) per RMU	EA	480
2	Protection testing & relay setting as per load by primary injection in a breaker compartment set per way	EA	40
3	Dismanteling/Refixing/Replacement of Relay by providing fixing plate if required) per way	EA	50
4	Repairing/Rewiring of CT ,Relay & other electrical items in RMU including wiring materials, wires & thimbels etc will be provided by the contractor per way	EA	40
5	Checking of SF6 gas leakage with sniffer/soap solution after removing covers,all Mechanism etc as per requirement per RMU	EA	50
6	Refilling of SF6 gas upto the OEM prescribed value after doing vaccum as per requirement at site per RMU	EA	240
7	Dismanteling/Reinstallation/Replacement of faulty Breaker/Isolator/Interlocking Mechanism per way	EA	140
8	Replacement/Dismantelling/Refixing of CT in all make RMU per CT	EA	50
9	Repairing/Replacement of VPIS set of all make RMU (per way)	EA	70
10	Repair of old damaged isolator/Breaker mechanism & handover repaired mechanism to BSES store after certifyingit from BSES staff (spares to be provided by BSES)		4
11	Taking of photographs before start of work , photographs after completing the work & uploading in the system( In Soft) per photo)	EA	480
12	Declaring RMU not repairable at site after carrying out PC test ,Insulation test , Mechanism operation test and gas leakage testing etc per RMU	EA	96
13	Removing , refixing the cable , opening all cable connections from the cable compartment ,cleaning of bushing , tightening with OEM specified torque with torque wrench after fixing boots or 3 layer tapes (Ensure no pressure on bushing) per way	EA	20

14	Cleaning of flashed compartment & removing carbon from bushing. Carryout PC test after making 3 layers coating of anti tracking paint on the bushing of each compartment	EA	80
15	Coating of anti tracking paint on bushing in one set of compartment (anti tracking paint will be provided by BSES)	EA	80
16	Replacement of manometer in all make RMU per RMU	EA	50
17	Replacement of trip coil per way	EA	48
18	Replacement of Push button assembly arrangement & its accessories (Z strip liver, push button plate, handle operating socket etc) Material will be provided by the BSES per way	EA	72
19	Replacement of bushing (ABB Make) per piece	EA	60
20	Removing melted stud from bushing & creating thread inside the bushing by tap handle & making RMU operational	EA	40
21	Providing of S.S/Brass Nut with washer in all repaired RMU per piece	EA	60
22	Providing & replacement of Battery in all make RMU protection relay per relay	EA	50
23	Providing of Reset strip of CGL make per piece	EA	100
24	Providing & fixing of cleats for all make RMU (C-clamp/wooden cleats + Cleat supporting) per piece	EA	40
25	Providing of Sumo for 8 Hrs (Commercial Vehicle)	per trip	10

### c) Activity ACB Repair

Sr No	Material/Service description	Expected QUANTITY FOR 2 yr			
		400A	800A	1250A	2000A
1	Lifting of faulty ACB from store, Cleaning with air blower / cotton cloth, Carrying out complete electrical & mechanical initial testing on ACB which includes, Physical ON/OFF, continuity & High voltage PC test by vendor staff in the presence of BSES staff, . washing with high pressure jet pump after unassembling all parts like Bus bars, phase separators, mechanism, Relay, CTs etc from the enclosure	250	120	420	210

2	Repairing of faulty mechanism of ACB which includes unassembling/reassembling/replacement of faulty component in the breaker mechanism any number of times ,making all adjustments in mechanism till the proper working of ON/OFF operation of ACB ,setting of ON/OFF push buttons,springs etc are obtained	230	110	400	200
3	Refixing/replacement of protection relay,CTs after making adjustments in the body or by fixing frame( if required) ,carrying out new wiring , etc as per BSES requirement	200	100	360	160
4	Repairing the ACB body for all damages & covers, Painting of complete ACB & its allied parts as per BSES requirements & painting of SAP tag nos after making yellow base painting per ACB (paint to be provided by the vendor)	250	120	420	210
5	Reassembling of all parts in ACB enclosure ,refixing/replacement of bus bars as per its rating & design as prescribed by BSES ,fixing of phase separators, protective sheet etc, welding of mechanism, neutral Bus bar /CT arrangement	250	120	420	210
6	Insulation of incoming & outgoing aluminium bus bars with heat shrinkable sleeves (R,Y,B & N colour) per piece as per BSES specifications (sleeves to be provided by the vendor)	250	120	420	210
7	Complete testing & its certification from graduate/qualified Engineer which includes Insulation test ,Impression test,ON-OFF operation test & filling up of results in test report format of BSES and tagging it at a place prescribed by the BSES	250	120	420	210
8	Transportation of material from workshop to store or from store to store by half body truck by providing of labour for loading unloading of material for 8 Hrs	80	20	60	40
9	Dismanteling of major items from unrepairable/scrap ACB,like mechanism,copper contacts,Aluminium Bus bars,Arc chutes,Relays,Trip coil,CTs,Front and top cover & deposit of usable items in workshop store & returning of unusable items in scrap store as per directions of BSES staff	80	20	60	40
10	Repairing of old faulty rectifier of ACB per piece	160	80	300	100

<b>11</b>	Fixing & providing of all types of petty items nuts, bolts,washers,spring washers,spring locks,springs,cotton cloth,oils,grease,rubber gasket etc ,adhesive or any other related minor parts/material required in the repairing work per ACB	250	120	420	210
<b>12</b>	Providing of CTs after Repairing/rewinding of old faulty CT per piece s per BSES specifications (faulty CTs to be provided by the BSES)	200	60	220	100
<b>13</b>	Providing of Aluminium Bus Bar per piece as per OEM design & BSES specifications	500	240	840	420
<b>14</b>	Applying of silicone sealing in ACB as per BSES specifications (silicone seling compnd to be provided by the vendor)	250	120	420	210
<b>15</b>	Fixing of trip coil & its arrangement of tripping in all make ACBs wherever reqd	200	100	360	160
<b>16</b>	Packing of repaired ACB with button type polyethlene sheet all arround to avoid water ingressing & damaging during transportation	250	120	420	210
<b>17</b>	Painting of mechanism/arc chute pole assembly/pole assembly separator of ACB by spray paint as per BSES specifications(Paint to be provided by the vendor)	200	110	360	180
<b>18</b>	Fixing & providing of cover holding arrangement per piece as per BSES specification	220	120	420	210
<b>19</b>	On site repair of ACB by carrying out complete repair which includes mechanical repairing ,electrical repairing ,replacement of faulty parts, repair/replacement of wiring,change of CTs & replacement of microprocessor relay & testing of protection circuit by primary or secondary testing at site thus making ACB fully operational at site	8	6	4	2
<b>20</b>	Providing of insulator per piece as per requirement & as per BSES specifications	200	100	300	100
<b>21</b>	Providing of bus Bar Seprator in ACB FRP (Glass Fibre) per set as per BSES specifications	250	120	420	210
<b>22</b>	Providing of cover per piece as per BSES specification	30	20	50	22
<b>23</b>	Providing of Arc Chute per piece as per BSES specifications	60	40	100	44
<b>24</b>	Providing of pole seprator per piece in ACB per piece as per BSES specifications	100	100	100	100
<b>25</b>	Providing of relay cover ACB as per BSES specification	60	40	100	44

26	Providing of thermal relay per ACB as per requirement & as per BSES specifications	100	100	100	100
27	Providing of adaptor kit for thermal relay per ACB as per BSES specifications	100	100	100	100
28	Providing of stand for fixing thermal relay in ACB per piece as per BSES design & specifications	100	100	100	100
29	Providing of trip coil as per required make of ACB & as per BSES specifications per piece	200	100	360	160
30	Providing of protective sheet after painting with ISI mark primer & two coats of ISI mark paint or zinc make & making arrangement of air releasing arrangement duly sealed with silicone as per BSES requirement & specifications per ACB	250	120	420	210
31	Providing of new CT per piece of all make & all ratio as per requirement & as per BSES specifications per piece	700	600	600	600
32	Providing of trip coil fixing arrangement per set as per BSES specifications	200	100	360	160
33	Providing of pole assembly separator per set (two Pieces) in ACB as per BSES specifications	100	100	100	100
34	Providing of insulating pipe per piece as per BSES specifications	250	120	420	210
35	Providing of relay cover in ACB per piece as per requirement & as per BSES specifications	60	40	100	44
36	Providing of CT Supporter per piece as per BSES specifications	140	100	100	100
37	Providing of plug in socket per piece for SR15G or SR 18G type relay according to BSES specifications	40	40	60	44
38	Providing of new auxiliary contact (2 NO+2NC) or making microswitch arrangement for disconnecting supply to trip coil per piece	20	20	20	20
39	Providing of new rectifier per piece as per requirement & as per BSES specifications	180	180	180	180
40	Providing of ON/OFF Push Button per Piece as per BSES Specifications	20	20	20	20
41	Providing of Trip Mechanism Cover per piece	100	100	100	100
42	Providing of "ON/OFF or Tripped " indicator lamps (Micro switch, On/OFF indicator & another related material to be provided by vendor) after making arrangement of fixing by cutting on the cover/protective sheet by completing its wiring with proper thimbles per ACB	20	20	20	20

43	Providing & Fixing of "ON/OFF or Tripped " indicator lamps & providing extension of ON/OFF contacts to terminal plate (Terminal plate ,Micro switch,On/OFF indicator& other related material to be provided by vendor) after making arrangement of fixing by cutting on the cover/protective sheet by completing its wiring with proper thimbles per ACB	20	20	20	20
44	Providing of phase separator per piece in ACB with FRP sheet (Glass Fibre) as per BSES specifications	200	100	300	160

**Bid Form**

To

Head of Department

Contracts & Material Deptt.

BSES Yamuna Power Ltd

3<sup>RD</sup> Floor, "A" Block, Shakti kiran Building

Karkardooma , New Delhi-110032

Sir,

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

2 Having examined the Bidding Documents for the above named works, we the undersigned, offer to provide our services in full conformity with the Terms and Conditions and technical specifications of the contract .

3 If our Bid is accepted, we under take to provide our services as per completion schedule mentioned in the tender document from the date of award of work order/letter of intent.

4 If our Bid is accepted, we will furnish a performance bank guarantee as mentioned in the RFQ for due performance of the Contract in accordance with the Terms and Conditions.

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

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

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

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

Dated this ..... day of ..... 2020

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

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

(IN BLOCK CAPITALS) .....

**PERFORMA OF CONTRACT PERFORMANCE BANK GUARANTEE**

(TO BE ISSUED ON RS 100/- STAMP PAPER)

Bank Guarantee No:

Place:

Date:

To

BSES Yamuna Power Limited

Whereas BSES YAMUNA POWER LTD (hereinafter referred to as the "Purchaser", which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) has awarded to M/s. \_\_\_\_\_ with its Registered/ \_\_\_\_\_ Head \_\_\_\_\_ Office at \_\_\_\_\_

(hereinafter referred to as the "Supplier" which expression shall unless repugnant to the context or meaning thereof, include its successors administrators, executors and assigns), a contract no. \_\_\_\_\_ dated \_\_\_\_\_ (the Contract); \_\_\_\_\_

And whereas the value of the Contract is Rs. \_\_\_\_\_ ( The Contract Value).

And whereas it is a condition of the Contract that the Supplier shall provide a Performance Bank Guarantee for the due and faithful performance of the entire Contract for a sum equivalent to - % of the Contract Value to the Purchaser on or before

And whereas the Bank under instructions from the Supplier has agreed to guarantee the due performance of the Contract.

Now it is agreed as follows:

1. We (Name of the Bank) having its Head Office at

(hereinafter referred to as the Bank, which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) shall indemnify and keep indemnified the Purchaser for, and guarantee and undertake to pay to the Purchaser immediately on written demand, a sum equivalent to % of the Contract Value

as aforesaid at any time upto (day/month/year) without any demur, reservation,

contest, recourse or protest and/or without any reference to the Supplier, against all losses, damages, costs and expenses that may be caused to or suffered by the Purchaser by reason of any default on the part of the Supplier in performing and observing any and all the terms and conditions of the Contract or breach on the part of the Supplier of terms or conditions of the Contract.



2. The demand shall consist only of an original letter issued by Purchaser stating that the Supplier has failed to fulfill its obligations under the Contract. Such demand made by the Purchaser on the Bank shall be conclusive and binding notwithstanding any difference or dispute between the Purchaser and the Supplier or any difference or dispute pending before any Court, Tribunal, Arbitrator or any other authority.

3. The Bank undertakes not to revoke this guarantee during its currency without previous written consent of the Purchaser and further agrees that the guarantee herein contained shall continue to be enforceable during the period that would be taken for satisfactory performance and fulfillment in all respects of the Contract or in the event of any dispute between the Purchaser and Supplier until the dispute is settled (provided that the claim/ demand under this guarantee is lodged /referred during the currency of this guarantee) or till the Purchaser discharges this guarantee whichever is earlier.

4. The Purchaser shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance of the Contract by the Supplier. The Purchaser shall have the fullest liberty, without affecting the liability of the Bank under this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Supplier, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract. or any other course or remedy or security available to the Purchaser. The Bank shall not be released of its obligations under these presents by any exercise by the Purchaser of its liberty with reference: to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Purchaser or any other indulgence shown by the Purchaser or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

5. The Bank agrees that the Purchaser and its option shall be entitled to enforce this guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Supplier and notwithstanding any security or other guarantee that the Purchaser may have in relation to the Supplier's liabilities.

6. Notwithstanding anything contained hereinabove the liability of the Bank under this guarantee is restricted to a sum equivalent to % of the Contract Value ie. Rs.(Rupees) and it shall remain in force upto and including .Unless a demand to enforce a claim under this guarantee is made against the Bank within 3 months from the the above date of expiry i.e. up to all the rights of the Purchaser under the said guarantee shall be forfeited and the Bank shall be released and discharged from all liabilities thereafter.

7. This Performance Bank Guarantee shall be governed by the laws of India.

Dated this Witness

day of 2020 at

1. For Bank

2. Signature Name

Power of Attorney No:

Banker's Seal

**FORMAT FOR EMD BANK GUARANTEE**

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

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

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

Sealed with the Common Seal of the said Bank this\_\_\_\_\_ day of\_\_\_\_\_ 2020\_\_\_\_\_.

THE CONDITIONS of this obligation are:

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

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

This guarantee will remain valid for 6(six) months after last date of receipt of tenders, 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**

**Communication Details**

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

<b><u>GENERAL INFORMATION</u></b>	
NAME OF COMPANY	
POSTAL ADDRESS	

<b>FOR TECHNICAL QUERY:</b>		
CONTACT PERSON & DESIGNATION	NAME	DESIGNATION
E-MAIL	MOBILE NO	TELEPHONE NO

<b>FOR COMMERCIAL QUERY:</b>		
CONTACT PERSON & DESIGNATION	NAME	DESIGNATION
E-MAIL	MOBILE NO	TELEPHONE NO

## **APPENDIX-I**

### **TERMS & CONDITIONS FOR REVERSE AUCTION**

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

Reverse auction shall be governed by following terms and conditions:

- 1) BYPL shall provide the user id and password to the authorized representative of the bidder. (Duly signed Authorization Letter in lieu of the same shall be submitted along with the bid).
- 2) BYPL will make every effort to make the bid process transparent. However, the award decision by BYPL would be final and binding on the bidder.
- 3) The bidder agrees to non-disclosure of trade information regarding the purchase, identity of BYPL, bid process, bid technology, bid documentation and bid details.
- 4) The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
- 5) Bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, Internet response issues, software or hardware hangs; power failure or any other reason shall not be the responsibility of BYPL.
- 6) In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out rightly rejected by BYPL.
- 7) The bidder shall be prepared with competitive price quotes on the day of the bidding event.
- 8) The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at BYPL site/ store
- 9) The prices submitted by a bidder during the auction event shall be binding on the bidder.
- 10) No requests for time extension of the auction event shall be considered by BYPL.
- 11) The bidder shall submit a detailed price breakup sheet of the final prices in the format as required by BYPL within two days of completion of the auction. In the detailed price breakup; in case, the bid for any line item is more than that submitted in the initial bid (received as a part of tender), the item rate as mentioned in the initial price bid shall be binding on the bidder.