

BIDDING DOCUMENT

FOR

**Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam
Region of AEGCL**

Fund: "O&M HQ UAR"

**ASSAM ELECTRICITY GRID CORPORATION
LIMITED**



**BID IDENTIFICATION NO:
AEGCL/MD/CGM(UAR)/CB-Procurement/2026/BID**

Tender Fee: Rs.2000.00

SECTION 1

INSTRUCTION TO BIDDERS

**Corporate Office,
Assam Electricity Grid Corporation Limited, Bijulee Bhawan,
Paltan Bazar, Guwahati-781001
PHONE: 0361-2739520 FAX NO.0361-2739513
Web: www.aegcl.co.in Email: managing.director@aegcl.co.in**

1.1.0 INTRODUCTION:

The Chief General Manager (O&M), UAR on behalf of Assam Electricity Grid Corporation Ltd (AEGCL), hereinafter referred to as AEGCL or Purchaser invites single stage two envelope e-bids for the following work from eligible firms/companies/ contractors.

a) Name of work: Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL

1.2.0 INTENT OF THE TENDER ENQUIRY:

The intent of the Tender Enquiry is to invite proposals from the prospective and relevantly experienced and financially sound contractor(s) /firms to carry out the works as specified in this bidding document.

1.3.0 SCOPE OF WORK:

The major scopes of work are as follows: -

- a) Design, manufacture, testing, supply, delivery of equipment to destination site.
- b) Arrangements of any permits required for transportation and movement of supplied materials. However, AEGCL shall assist as far as practicable in the process.

1.4.0 TIME SCHEDULE:

The successful bidder shall have to complete the works within **12 (Twelve) months** from the date of signing of contract agreement. Bidder must submit a completion schedule bar chart for activities to complete the work within this time schedule.

1.5.0 ESTIMATE:

Rs.84,44,080.00 (Rupees Eight-Four Lakh Forty-Four Thousand and Eighty only) including GST.

1.6.0 ELIGIBILITY CRITERIA:

1.6.1. GENERAL

Bidder may be manufacturer of the offered products or a firm/company having authorisation from a manufacturer. In case the bidder is not a manufacturer of the offered products, bidder must submit manufacturer's authorisation using for that purpose Form-MA provided in Section-2 Bidding forms.

1.6.2. EXPERIENCE

To be qualified for the bid the bidder must compulsorily meet the following minimum criteria specified in (i), (ii) and (iii) below:

- i. Bidder OR if the bidder is not a manufacturer, offered product's manufacturer must have at least six (6) years of experience in design, manufacture and supply of the equipments as on the last date of bid submission. Bidder shall submit filled up form EXP-1 along with copy of past orders to establish its eligibility.
- ii. Bidder OR if the bidder is not a manufacturer, offered product's manufacturer must have supplied such equipments which are in successful operation for at least four (4) years within the last Eight (08) years as on the last date of bid submission. Bidder shall submit filled up form EXP-2 along with copy of orders and performance certificates to establish its eligibility.
- iii. Bidder must have experience of executing a supply order of electrical items in Govt agency within past six (6) years as on the last date of bid submission. Bidder shall submit filled up form EXP-3 along with copy of past orders and completion certificate/delivery Challan with customer signature to establish its eligibility.

Participation as Joint Venture/Consortium is allowed for this bid. In case bidder is participating as JV, experience of all partners combined should meet the eligibility criteria (Experience) under clause 1.6.2.

1.6.3. FINANCIALS:

- i. As a minimum, a Bidder's net worth calculated as the difference between total assets and total liabilities should be positive. As supporting document, bidder should submit audited balance sheets or other financial statements acceptable to the Purchaser, for last 3 (three) financial years, i.e., FY 2022-23, 2023-24 and 2024-25 to demonstrate the current soundness of the Bidders financial position and its prospective long-term profitability. Apart from audited balance sheet, bidder shall submit duly filled and signed **Form 'FIN-1'** given in Section 2. Using the 'Form LIT – 1' (Section 2, Bidding Form), bidder shall list all Pending Litigation. All pending litigation shall be treated as resolved against the Bidder and so shall in total not represent more than 50% percent of the Bidder's net worth.
- ii. Bidder must have minimum **Average Annual Turnover (AAT) of Rs.1,27,00,000.00 (Rupees One Crore Twenty-Seven Lakh) only**. AAT shall be calculated by averaging total certified payments received for contracts in progress or completed, for the last 3 (three) years, i.e, FY 2022-23, 2023-24 and 2024-25. The bidder shall furnish, along with its bid, audited balance sheets and duly filled up Form '**FIN-2**' in support of this Clause.
- iii. Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:
 - (a) the cash-flow requirement, **Rs.25,00,000.00 (Rupees Twenty Five Lakh only)** for this work. **The Cash flow statement must be submitted in the format prescribed by the Institute of Chartered Accountant of India.**
 - (b) the overall cash flow requirements for this contract and its current works commitment.

Bidder must submit duly filled and signed **Form FIN-3** of section 2 in support of this clause.

Participation as Joint Venture/Consortium is allowed for this bid. In case bidder is participating as JV, all partners combined should meet the eligibility criteria (Financials) under clause 1.6.3.

1.6.4. TYPE TEST REPORT:

Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL

The offered product(s) must be type tested at CPRI or NABL accredited laboratory for critical performance at the time of bid submission. Bidder must submit full type test reports for the offered products along with the techno-commercial bid.

Type Test Reports shall not be older than ten (10) years as on the date of technical bid opening.

1.7.0 SITE VISIT:

The bidders are advised to visit and examine the sites of work and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid. The costs of visiting the Site shall be at the bidder's own expense.

1.8.0 QUANTUM OF WORK:

The quantum of work is stated in the PRICE SCHEDULE at the end of section 2 – bidding forms.

Tentative delivery locations shall be as follows –

SL. No.	Items	Qty	Delivery Destination
1.	145KV, 3150 A, 40 kA for 3 sec, Gang Operated SF6 Circuit Breaker	1	220KV Mariani GSS
2.	145KV, 3150 A, 40 kA for 3 sec, Gang Operated SF6 Circuit Breaker	1	132KV Diphu GSS
3.	145KV, 3150 A, 40 kA for 3 sec, Gang Operated SF6 Circuit Breaker	1	132KV Nazira GSS
4.	145KV, 3150 A, 40 kA for 3 sec, Gang Operated SF6 Circuit Breaker	1	132KV Golaghat GSS

1.9.0 QUERY ON THE BIDDING DOCUMENT:

Prospective bidder may submit queries, if felt necessary, requesting clarification of any bid clause. Such queries must be submitted in the e-tendering portal latest by the **Tender clarification end date and time** mentioned in the Bid Data Sheet. Purchaser shall clarify to the extent felt necessary or issue corrigendum for any amendment required in the bidding document. Such corrigendum/clarification shall be made available in the e-tendering portal and official website of AEGCL, www.aegcl.co.in. Any query submitted outside the e-tender portal viz. email, or in physical letters, shall not be entertained.

1.10.0 CLARIFICATION OF BIDS

To assist in the examination, evaluation, and comparison of the Technical and Price Bids, and qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the substance of the Technical Bid or prices in the Price Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the evaluation of the bids. If a Bidder does not provide clarifications of its bid by the date and time set in the Purchaser's request for clarification, its bid may be rejected.

1.11.0 DEADLINE FOR SUBMISSION OF BIDS

Bids shall be received ONLINE only on or before the date and time indicated in the **Bid Data Sheet**. The Purchaser may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

1.12.0 SUBMISSION OF BID:

The bidder shall submit the techno commercial & price bid through e-tendering portal <https://assamtenders.gov.in>. All documents as required by this bidding document shall be scanned and

uploaded in the portal. Price schedule should be submitted in the format provided in the online portal. Bidder must go through the document checklist provided in this bidding document and submit all required document. Bidders are also requested to submit the informations in the format provided in this bidding document where applicable.

In addition to the online bid submission, (i) Duly filled and signed **Letter of technical bid** and (iii) **Authorization letter of bid signatory** must be submitted in a sealed envelope superscribed with the name of bidder, full address, IFB reference, name of work etc. at the office of the Managing Director, Assam Electricity Grid Corporation Ltd, Bijulee Bhawan, Paltan Bazar Guwahati-781001 **one hour prior to bid submission end date and time. In case any of these three documents are not received; the bid shall be summarily rejected.**

1.13.0 BID VALIDITY

The validity of bid shall be for **180(One Hundred Eighty) days** from the date of bid submission end date.

1.14.0 OPENING OF TECHNO-COMMERCIAL BIDS

The Purchaser shall conduct the opening of Technical Bids through online process at the address, date and time specified in the BDS. Bidders at their discretion may attend the techno-commercial bid opening.

Price bid of those bidders shall only be opened whose techno-commercial bids are found to be responsive to the requirement of the bidding document.

1.15.0 EARNEST MONEY DEPOSIT (EMD):

The bid must be accompanied with earnest money as mentioned in the **Bid Data Sheet** against the works to be deposited through online mode only in Assam e-tender portal. The EMD should be submitted along with Techno-Commercial bid. The earnest money will be released to the unsuccessful bidders on finalization of the tenders. The EMD to the successful bidder will be released on submission of Security Deposit after execution of the contract agreement.

1.16.0 PRICE BASIS:

Cost quoted by the bidder shall be inclusive of all scope of work as specified in this bidding document including any related services that is implicit to carry out the work successfully. Price will be firm and no price variation will be allowed within the completion period given in the work order.

1.17.0 DEVIATIONS, RESERVATIONS, AND OMISSIONS:

During the evaluation of bids, the following definitions apply:

- a) "Deviation" is a departure from the requirements specified in the Bidding Document;
- b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
- c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

1.18.0 PRELIMINARY EXAMINATION OF TECHNICAL BIDS:

The Purchaser shall examine the Techno-commercial Bid to confirm that all documents and technical documentation requested in this bidding document have been provided, and to determine the completeness of each document submitted. If any of these documents or information is missing, **the Bid may be rejected.**

The Purchaser shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer **shall be rejected.**

- (a) Duly filled and signed **Letter of technical bid** and

- (b) **Written confirmation of authorization to commit the Bidder (i.e., Notarized Power of Attorney)**
- (c) **Notarized JV agreement, if bidder is a JV. However, the bidder is required to submit registered JV agreement once the contract is awarded to them.**

Bidder should submit hard copies of the documents mentioned above in (a) (b) and (c) in a physical envelope prior to deadline for technical bid submission. Techno-commercial bids shall be summarily rejected if these three documents are not submitted in hard copy deadline for technical bid submission.

1.19.0 RESPONSIVENESS OF TECHNO-COMMERCIAL BID:

The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself. A substantially responsive Techno-commercial Bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,

- a) if accepted, would:
 - (i). Affect in any substantial way the scope, quality, or performance of the plant and services specified in the Contract; or
 - (ii). Limit in any substantial way, inconsistent with the Bidding Document, the Purchaser's rights or the Bidder's obligations under the proposed Contract; or
- b) If rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.

The Purchaser shall examine the Techno-commercial Proposal, to confirm that the requirement of the bidding document have been met without any material deviation or reservation.

If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Purchaser and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

1.20.0 EVALUATION OF PRICE BIDS:

The Purchaser shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be used.

To evaluate a Price Bid, the Purchaser shall consider the following:

- a) The bid price excluding taxes as quoted in the Price Schedules;
- b) Price adjustment for correction of arithmetical errors.
- c) The following methodology will be practiced for identification and treatment of the Abnormally Low Bids (ALB) in this tender process of AEGCL:
 - i. Absolute Approach is to be considered when there is fewer than five substantially responsive bidders and if the bid price is 20% or more below AEGCL's cost estimate then AEGCL's tender evaluation committee should clarify the Bid price with the bidder to determine whether the Bid is Abnormally low.
 - ii. Relative approach is to be considered when there are at least 5(five) nos. of substantially responsive bids and the lowest bid price is 20% or more below AEGCL's cost estimate. In this approach, first the Average bid price is determined and then by deducting the standard deviation from the Average bid price, potentially ALB may be determined.
- d) In case of an ALB, the tender evaluation committee/appropriate authority of the respective tenders shall undertake the following three stage review process which is as below:

- i. To identify ALB as per the steps mentioned in SI no. 1.20.a.(i) and 1.20.b.(ii) Whichever is applicable.
 - ii. To seek and analyse the clarifications from the abnormally low Bidder in terms of resource inputs and pricing, including overheads, contingencies and profit margins. In that respect, the committee may refer to guideline of World Bank, AIIB, ADB etc. prescribed for ALB.
 - iii. To decide whether to accept or reject the bid.
 - iv. On acceptance of the bid, whether Additional Performance Security is to imposed on the bidder supplemented by adequate justification.
- e) In case of acceptance of ALB with Additional Performance Security:
- I. If any abnormally low bid is accepted under point 1.20.d.(iii) with additional performance security, it is to be noted that the total performance security should not exceed 20% of the total contract value.
 - II. The additional performance security shall be treated as part of the original performance security and shall be valid for a period similar to that applicable for defect liability period of the contract.
 - III. Non submission of the additional performance security shall constitute sufficient ground for rejection of the bid and similar assessment shall then be initiated for next ranked bidder if that bidder is also identified as ALB.

1.21.0 AWARD CRITERIA:

Purchaser shall in general award the contract to the lowest substantially responsive bidder. However, the purchaser reserves the right to not award contract to the lowest substantially responsive bidder without thereby incurring any liability to Bidders.

1.22.0 PURCHASER'S RIGHT TO ACCEPT ANY BID, AND TO REJECT ANY OR ALL BIDS:

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

1.23.0 NOTIFICATION OF AWARD:

Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its bid has been partially or fully accepted quoting acceptance of the bid. The notification letter (hereinafter called the "Notification of Award") shall specify the sum that the Purchaser will pay the Contractor (hereinafter called "Contract Price") in consideration of the execution and completion of the services. Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

1.24.0 PERFORMANCE SECURITY:

Within 15 (five) days of receipt of the Notification of Award from AEGCL, the successful bidder shall furnish to AEGCL a performance security in an amount of 10 (ten) percent of the Contract Price in accordance with the Conditions of Contract. The form of performance security provided in Section 3 of the bidding documents may be used or some other form acceptable to AEGCL. The performance guarantee BG shall be valid through 30 days beyond the guarantee period.

1.25.0 SIGNING OF CONTRACT AGREEMENT:

Within **15 (Fifteen) days** of receipt of the Notification of Award, the successful Bidder shall be required to sign the Contract Agreement with AEGCL using for that purpose, the contract form provided with this bidding document failing which AEGCL at its discretion may cancel the award.

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**Annexure to SECTION 1
BID DATA SHEET**

Name of Work	Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL
Location of Work	Upper Assam Region of AEGCL
NIT No.	AEGCL/MD/CGM(UAR)/CB-Procurement/2026/05 , Dated:11.06.2026
Bid Identification No.	AEGCL/MD/CGM(UAR)/CB-Procurement/2026/BID
Estimate (In Indian Rupees)	Rs.84,44,080.00 (Rupees Eight-Four Lakh Forty-Four Thousand and Eighty only) including GST
Earnest Money Deposit (EMD)	Rs.1,70,000.00 (Rupees One Lakh Seventy Thousand) Only
Purchase's Address for correspondence	The Chief General Manager(O&M), UAR, AEGCL 1st Floor, Bijulee Bhawan, Paltanbazar Guwahati (Assam) 781001 Contact Person: AGM, O&M, UAR Facsimile number: +91 361 2739513 Electronic mail address: cgmom.uar@aegcl.co.in
Pre-bid date	Shall be notified, if any, in due course.
Bid submission mode	E-tenders shall be accepted through online portal https://assamtenders.gov.in only
Address for bid opening	The Chief General Manager(O&M), UAR, AEGCL Floor/Room number: First Floor Street Address: Bijulee Bhawan, Paltanbazar City: Guwahati (Assam) PIN Code: 781001 Country: India
Key dates	Tender publishing date: 12:00 Hrs.,12.06.2026 Tender submission start date: 12:00 Hrs., 19.06.2026 Tender clarification end date: 12:00 Hrs., 19.06.2026 Tender submission end date and time: 12:00 Hrs., 29.06.2026 Techno-commercial bid opening date: 14:00 Hrs., 30.06.2026

SECTION -2 BIDDING FORMS

(This Section contains the forms which are to be completed by the Bidder and submitted as part of his Bid)

Form – 1
Document checklist

SL. No.	Document to be submitted	Submitted (Yes/No)	Name of uploaded pdf
1.	Letter of technical bid (Form-2)		
2.	JV agreement/Deed of consortium (applicable only if bidder is participating as a JV/consortium)		
3.	Notarised Power of attorney for the person signing the tender		
4.	EMD		
5.	Bidders company/firm registration certificate/certificate of incorporation		
6.	Manufacturer's authorization (Form MA) (Applicable for bidder who is not manufacturer of offered product)		
7.	GST registration		
8.	Filled up Form ELI-1		
9.	Filled up Form LIT		
10.	Filled up Form FIN-1		
11.	Filled up Form FIN-2		
12.	Filled up Form FIN-3		
13.	Audited Balance sheet for last three years		
14.	Bank solvency certificate/other supporting document		
15.	Filled up Form EXP-1		
16.	Filled up Form EXP-2		
17.	Filled up Form EXP-3		
18.	Order/Contract copies establishing supplying offered product in past		
19.	Performance certificate of offered product		
20.	Document establishing manufacturing unit details		
21.	GTP and drawings		
22.	Type test reports		
23.	Completion schedule bar chart		
24.	Letter of Undertaking for site visit		

Note: Bidders are requested to submit all required documents in e-tender portal and **physical copies of i) Letter of technical bid, ii) Power of Attorney(notarized) for bid signatory to Tender inviting authority and iii) Notarized JV agreement, if bidder is a JV. However, the bidder is required to submit registered JV agreement once the contract is awarded to them.**

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(In bidders letterhead)

Form-2 Letter of technical bid

Date:

To

The Chief General Manager (O&M), UAR
AEGCL, 1st Floor, Bijulee Bhawan,
Paltan Bazar, Guwahati-01

Bid Identification No: **AEGL/MD/CGM(UAR)/CB-Procurement/2026/BID**

Sir,

I/We the undersigned, declare that, we, [insert name of the bidder] having registered office at [insert address of the registered office] are established manufacturer/supplier of _____ items.

I/we have read the bid document and do not have any reservation to any of the clause therein. We offer to execute the work of:

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in conformity with the bid specification. Our Bid shall be valid for a period of **180(One Hundred Eighty)** days from the date fixed for the bid submission deadline and it shall remain binding upon us at any time before the expiration of that period.

Common Seal and Signature of the authorised person:

Name:

Designation:

Note:

i) Insert name and address in appropriate places.

ii) Strike out which is not applicable.

Form - 3

Format for Bank Guarantee (Earnest money deposit)
(EMD to be paid in online mode only)

Form 4

Manufacturer's Authorization

(To be submitted in Manufacturer's Letterhead)

Bid No.: AEGCL/MD/CGM(UAR)/CB-Procurement/2026/BID

To

The Chief General Manager (O&M), UAR
AEGCL, 1st Floor, Bijulee Bhawan,
Paltan Bazar, Guwahati-01

WE *[insert: name of Manufacturer]* who are established and reputable manufacturers of *[insert: name and/or description of the Goods]* having production facilities at *[insert: address of factory]* do hereby authorize *[insert: name & address of Bidder]* (hereinafter, the "Bidder") to submit a bid the purpose of which is to provide the following goods, manufactured by us, and to subsequently negotiate and sign the Contract:

1. -----
2. -----

We hereby extend our full guarantee and warranty in accordance with **Clause 5.11.0** of the Special Conditions of Contract, for the above specified Goods supporting the Supply of specified Goods and fulfilling the Related Services by the Bidder against this Bidding Documents, and duly authorize said Bidder to act on our behalf in fulfilling these guarantee and warranty obligations.

Further, we also hereby declare that we and *[insert: name of the Bidder]* have entered into a formal relationship in which, during the duration of the Contract (**including related services and warranty / defects liability**) we, the Manufacturer or Producer, will make our technical and engineering staff fully available to the technical and engineering staff of the successful Bidder to assist that Bidder, on a reasonable and best effort basis, in the performance of all its obligations to the Purchaser under the Contract.

For and on behalf of the Manufacturer

Common Seal and Signature of the authorised person:

Name:

Designation:

NOTE:

This MA should be signed by a person having either of the following-

- 1) Valid Power of attorney
- 2) Authorised by Managing Director
- 3) Member of Board of Directors

Form-ELI-1
Bidder's information Sheet

Sl. No.	Particulars	Bidders' response
1	Bidders name and registered address	
2	Bidders authorised representative, designation and contacts	
3	GST Registration No.	

(Signature and common seal)

Name:

Designation:

Date:

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**Form – LIT
Pending Litigation**

Year	Matter in Dispute	Value of Pending Claim in Rupees	Value of Pending Claim as a Percentage of Net Worth

(Signature and common seal)

Name:

Designation:

Date:

**Form FIN – 1
Financial Situation**

Information from Balance Sheet

Financial Data for Previous 3 Years [Rupees]	Year 1 [Mention Financial Year]	Year 2 [Mention Financial Year]	Year 3 [Mention Financial Year]
Total Assets			
Total Liabilities			
Net Worth			
Current Assets			
Current Liabilities			

Information from Income Statement

Total Revenues			
Profits Before Taxes			
Profits After Taxes			

Note: To be supported by audited financial documents

(Signature and common seal)

Name:

Designation:

Date:

**Form FIN – 2
Average Annual Turnover**

Annual Turnover Data for the Last 3 Years	
Year	Amount (Rupees)
Average Annual Turnover	

The information supplied should be the Annual Turnover of the Bidder in terms of the amounts billed to clients for each year for contracts in progress or completed.

(Signature and common seal)

Name:

Designation:

Date:

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Form FIN – 3 Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total cash flow demands of the subject contract or contracts with necessary supporting documents.

Financial Resources		
No.	Source of financing	Amount (Rupees)
1		
2		
3		

(Signature and common seal)

Name:

Designation:

Date:

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Form – EXP-1

Bidder must fill this form to establish eligibility as per clause 1.6.2(i)

Sl. No.	Customer name	Contract No. and Date	Work order value	Contractor/supplier	Details of Product supplied and manufacturer of the product

Note: Order/contract copies are to be submitted as supporting document.

(Signature and common seal)

Name:

Designation:

Date:

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Form – EXP-2

Bidder must fill this form to establish eligibility as per clause 1.6.2(ii)

Sl. No.	Equipment/Product name	Contract No. and date	End Customer	Contractor/supplier	Completion date	Date of issue of performance certificate

Note: Following documents are to be submitted as supporting document:

- ii) Relevant order/contract copies.
- iii) Performance certificate (Should be in end customer's letterhead).

(Signature and common seal)

Name:

Designation:

Date:

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Form – EXP-3

Bidder must fill this form to establish eligibility as per clause 1.6.2(iii)

Sl. No.	Customer name	Contract No. and date	Work order value	Contractor/supplier	Brief description of work	Completion date

Note: Following documents are to be submitted as supporting document:

- i) Relevant order/contract copies.
- ii) Completion certificate or Delivery Challan with customer signature.

(Signature and common seal)

Name:

Designation:

Date:

Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL

Price schedule

All prices are in Indian Rupees and exclusive of taxes

PRICE SCHEDULE 1: Supply						
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Unit ExWorks (exclusive of taxes) In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT (Without Taxes) in Rs. P	TOTAL AMOUNT In Words(IN R)
1	2	4	5	13	53	55
1.00	145KV, 3150 A, 40 kA for 3 sec, Gang Operated SF6 Circuit Breaker	4.00	Sets.		0.00	INR Zero Only
Total in Figures					0.00	INR Zero Only
Quoted Rate in Words	INR Zero Only					

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PRICE SCHEDULE 2: Freight & Insurance						
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Unit ExWorks (exclusive of taxes) In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT (Without Taxes) in Rs. P	TOTAL AMOUNT In Words(INR)
1	2	4	5	13	53	55
1.00	145KV, 3150 A, 40 kA for 3 sec, Gang Operated SF6 Circuit Breaker	4.00	Sets.		0.00	INR Zero Only
Total in Figures					0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only				

Note: The price schedule presented here is for reference only. Bidders must submit the price using the price schedule available in e-tendering portal.

Section - 3

Purchaser's Requirements

TECHNICAL SPECIFICATION FOR 132KV CIRCUIT BREAKER (AIS)

3.1.0 SCOPE

3.1.1 The intention of this Section of the Specification is to cover design, manufacture, testing at manufacturer's works and of 132kV Circuit Breakers with all fittings and accessories including mounting structures as specified hereunder.

3.2.0 GENERAL REQUIREMENTS

3.2.1 The circuit breaker shall be of three phase unit (gang operated) (or) three identical single-phase units (as said in data sheet), outdoor, **SF6 gas filled** single pressure puffer type(132kV). The operating mechanism shall be electrically and mechanically trip/free with anti-pumping facility suitable for remote electrical closing, tripping as well as local Operation facility as specified. The CBs are meant for installation with Transformers & Lines **and capacitor banks as applicable.**

3.2.2 The circuit breaker shall be capable of 3-ph auto-reclosing.

3.2.3 The circuit breaker shall be so designed to withstand the effects of temperature, wind load, short circuit, **seismic conditions** and other adverse conditions.

3.2.4 The circuit breaker shall be capable of switching transformer magnetizing currents and shall be restrike - free.

3.2.5 All similar parts, particularly removable ones, shall be interchangeable with one another.

3.2.6 All cable ferrules, lugs, tags, etc. required for cabling from equipment control cabinet/operating mechanism to the central control cabinet of the breaker shall be supplied loose as per approved schematics.

3.2.7 The SF6 breaker shall be designed to ensure that condensation of moisture is controlled **by proper selection of organic insulating materials having low moisture absorbing characteristics**

3.2.8 The support structure of circuit breaker shall be hot dip galvanised. Sufficient galvanising thickness shall be achieved with **900 gm/m² (130 micron)**. All other parts shall be painted as per painting specification enclosed separately.

3.2.9 All mechanical parts and linkages shall be robust in construction and maintenance free over at least 10,000 switching operations except for lubrication of pins/articulated joints at 5000 operations **and electrical E2 performance.**

3.3.0 OPERATING MECHANISM

3.3.1 A power spring operated mechanism for closing and tripping shall be provided in the breaker control cabinet. This device shall be so interlocked that while it is under maintenance, the breaker cannot be operated from remote. A slow acting, manually operated device shall be provided for inspection and maintenance purposes.

3.3.2 Circuit breaker operating mechanism shall be capable of storing energy for at least two complete closing and tripping operations.

3.3.3 Each mechanism shall have an operation counter.

3.3.4 The operating mechanism shall be trip-free and mounted and enclosed in a weather-proof, vermin-proof, sheet steel cabinet conforming to IP: 55 degree of protection. Sheet steel thickness shall be as specified in data sheet. The cabinet shall also house relays, control and auxiliary equipment of each breaker and provision for terminating all

control, alarm and auxiliary circuits. It shall be provided with hinged doors with provision for locking and removable gland plates to be drilled at site. Inspection window shall be provided for observation of the instruments without opening the cabinet. It shall be mounted so as to provide convenient access from ground level. **Two trip coils shall be provided.**

- 3.3.5 The cabinet shall be fitted with a thermostatically controlled anti-condensation heater, a 15A, 1 phase, 5 pin socket outlets with switch and a cubicle illuminating lamp suitable for operation on 240 V AC 50Hz supply.
- 3.3.6 Circuit breakers shall feature high repeatability of absolute closing time over a wide range of parameters (ambient temperature, pneumatic pressure, control voltages, etc).
- 3.3.7 Main poles shall operate simultaneously. There shall be no objectionable rebound and the mechanism shall not require any critical adjustment. It shall be strong, rigid, positive and fast in operation.
- 3.3.8 **Pole discrepancy** shall be provided which shall detect pole position discrepancy.
- 3.3.9 The design of the circuit breaker shall be such that contacts will not close automatically upon loss of gas/ air pressure.
- 3.3.10 Closing release shall be capable of operating within the range of the rated voltage as specified in the data sheet. Shunt trip shall operate satisfactorily under all operating conditions of the circuit breaker up to the rated breaking capacity of the circuit breaker within the range of the rated voltages specified in the Data sheet.
- 3.3.11 Working parts of the mechanism shall be of corrosion resisting material. Bearings which require grease shall be equipped with pressure type grease fittings. Bearing pin, bolts, nuts and other parts shall be adequately pinned or locked to prevent loosening or changing adjustment with repeated operation of the breaker.
- 3.3.12 All controls, gauges, relays, valves, hard drawn copper piping and all other accessories as necessary shall be provided including the following:
- 3.3.13 Low pressure alarm and lock out relay with adjustable pressure setting suitable for operation on DC system
- 3.3.14 A no-volt relay for remote indication of power failure for compressor motor/ Spring Charge motor.
- 3.3.15 As long as power is available to the motor, continuous sequence of closing and opening operations shall be possible.
- 3.3.16 After failure of power supply to the motor, at least **two close-open** operation of the circuit breaker shall be possible from stored energy.
- 3.3.17 Spring charging motor shall be standard single phase universal motor suitable for 220 volts DC supply for Mariani GSS and 110 volts DC for Nazira, Diphu & Golaghat GSS .
- 3.3.18 Motor rating shall be such that it requires only about 30 seconds for full charging of the closing spring.
- 3.3.19 Closing action of the circuit breaker shall compress the opening spring ready for tripping.
- 3.3.20 During closing, springs are discharged and after closing of breaker, springs shall automatically be charged for the next operation. Facility for manual charging of closing springs shall be provided. Mechanical interlocks shall be provided in the operating mechanism to prevent discharging of closing springs when the breaker is already in the closed position.
- 3.4.0 **OPERATING MECHANISM CONTROL**
- 3.4.1 The breaker shall normally be operated by remote electrical control. However, provision shall be made for local electrical control. For this purpose, a local/remote selector switch,

close and trip control switch/push button shall be provided in the breaker central control cabinet.

- 3.4.2** Two electrically independent trip circuit including two trip coils per breaker shall be operated from two separate DC sources. First trip coil shall be utilized for tripping the breaker on main protection fault detection. Whereas second trip coil shall be used to trip the breaker when first trip coil fails to trip the breaker and backup protection comes into operation and shall also be used to trip the breaker on command.
- 3.4.3** The trip coils shall be suitable for trip circuit supervision during both **open and close position** of the breaker. Necessary terminals shall be provided in the central control cabinet of the circuit breaker by the supplier.
- 3.4.4** The auxiliary switch with **12NO+12NC** contacts of the breaker shall be positively driven by the breaker operating rod.
- 3.4.5** A conveniently located manual tripping lever or button shall also be provided for local tripping of the breaker and simultaneously opening the reclosing circuit. A local manual closing device which can be easily operated by one man standing on the ground shall also be provided for maintenance purpose. Direction of motion of handle shall be clearly marked.
- 3.4.6** When the spring get fully charged either through motor or hand cranking, the spring charging motor and the hand cranking **suitable mechanical and electrical indication shall be provided for same. On restoration of electrical supply the mechanical handle shall be automatically disengaged.**
- 3.5.0 SF6 GAS SYSTEM**
- 3.5.1** SF6 gas shall serve as an arc-quenching medium during opening/closing operation and as an insulating medium between open contacts of the circuit breaker.
- 3.5.2** The circuit breaker shall be single pressure **puffer** type. The design and construction of the circuit breaker shall be such that there is a minimum possibility of gas leakage and entry of moisture. There should not be any condensation of SF6 gas on the internal insulating surfaces of the circuit breaker.
- 3.5.3** All gasketed surfaces shall be smooth, straight and reinforced, if necessary, to minimise distortion and to make a tight seal, the operating rod connecting the operating mechanism to the arc chamber (SF6 media) shall have adequate seals. The SF6 gas leakage should not exceed 1% per year
- 3.5.4** In the interrupter assembly there shall be an absorbing product box to minimise the effect of SF6 decomposition products and moisture. The material used in the construction of the circuit breakers shall be such as fully compatible with SF6 gas decomposition products.
- 3.5.5** Each pole shall form an enclosure filled with SF6 gas independent of two other poles (145 and the SF6 density of each pole shall be monitored.
- 3.5.6** The dial type SF6 density monitor shall be adequately temperature compensated to model the pressure changes due to variations in ambient temperature within the body of circuit breaker as a whole. The density monitor shall have graduated scale and shall meet the following requirements:
- It shall be possible to dismantle the density monitor for checking/replacement without draining the SF6 gas by providing suitable interlocked non return valve coupling.
- 3.5.7:** SF6 gas shall be as per IEC 60376

3.7.0 BUSHINGS AND INSULATORS

3.7.1 Bushings and Insulators shall be of Porcelain, Solid core type. Porcelain used for the manufacture of bushings and insulators shall be homogeneous, free from defects, cavities and other flaws or imperfections that might affect the mechanical or dielectric quality and shall be thoroughly vitrified, tough and impervious to moisture.

3.7.2 Glazing of the porcelain shall be of uniform brown colour, free from blisters, burns and other similar defects. Bushings shall be designed to have sufficient mechanical strength and rigidity for the conditions under which they will be used. All bushings of identical ratings shall be interchangeable.

3.7.3 Puncture strength of bushings shall be greater than the dry flashover value. When operating at normal voltage, there shall be no electric discharge between the conductors and bushing which would cause corrosion or injury to conductors, insulators or supports by the formation of substances produced by chemical action. No radio interference shall be caused by the bushings when operating at the normal rated voltage.

3.7.4 Bushings shall satisfactorily withstand the insulation level specified in data sheet.

3.8.0 FIXED AND MOVING CONTACTS

3.8.1 Main contacts shall have ample area and contact pressure for carrying the rated current and the short time rated current of the breaker without excessive temperature rise which may cause pitting or welding. Contacts shall be adjustable to allow for wear, easily replaceable and shall have minimum moving parts and adjustments to accomplish these results. Main contacts shall be the first to open and the last to close so that there will be little contact burning and wear out.

3.8.2 Arcing contacts, if provided, shall be the first to close and the last to open and shall be easily accessible for inspection and replacement. Tips of arcing and main contacts shall be silver faced.

3.8.3 If multi-break interrupters are used, they shall be so designed and augmented that a fairly uniform voltage distribution is developed across them.

3.9.0 INTERLOCKS

3.9.1 Key release mechanical interlocks shall be incorporated in the operating mechanism for interlocking with the associated isolators, so that operation of the circuit breaker is dependent on a "key-trapped" situation. In addition, electrical interlocks with associated isolators shall be provided.

3.10.0 ADDITIONAL DUTY REQUIREMENTS

3.10.1 Circuit breakers shall be capable of clearing short line faults with the same impedance behind the bus corresponding to the rated fault current.

3.10.2 Circuit breakers shall be capable of breaking 25% of rated fault current at twice rated voltage under out of phase conditions.

3.10.3 The Bid shall highlight the design features provided to effectively deal with:

- a) Breaking of inductive currents and capacitive currents.
- b) Charging of long lines and cables.
- c) Clearing developing faults within the full rating of the breaker.
- d) Opening on phase opposition.

3.11.0 ACCESSORIES

3.11.1 Gas Pressure Detector

The circuit breaker shall be provided with gas pressure monitor with temperature compensation for initiating alarm and locking the operating mechanism in the event of abnormality. **Gas pressure monitor shall be combined for all three phases for 145kV Circuit Breakers. Each phase of Circuit Breaker shall be provided with pressure gauge with Red and Green zone and pressure level marked on the dial.**

3.11.2 Position Indicator

Each pole of the circuit breaker shall be provided with a position indicator.

3.11.3 Terminals

Each circuit breaker shall be provided with suitable terminal pads of high conductivity aluminium alloy for connecting to the line.

3.11.4 Auxiliary Switches

Each circuit breaker shall be equipped with auxiliary switches with sufficient number of contacts for control, indication and interlocking purposes. Twelve normally open and twelve normally closed contacts shall be provided as spares. All contacts shall be rated for the DC voltage specified in data sheet.

3.11.5 Terminal Blocks

All accessories, spare contacts of contactors and control devices shall be completely wired up to terminal block. All wirings which are connected to external circuit shall be terminated on terminal blocks installed in the control cabinet. The terminal blocks provided shall have twenty (20) percent spares. **Each terminal block shall be suitable to receive two conductors of minimum 2.5sqmm copper.**

3.11.6 Operating mechanism housing shall be supplied with all required accessories including the following:

- a) Padlocks and duplicate keys.
- b) Space heaters equipped with automatic thermostatic control.
- c) Local/remote changeover switch.
- d) Manually operated tripping push button/lever (mechanical) conveniently located to trip all three phases simultaneously.
- e) Control switches to cut off control power supplies.
- f) Fuses as required.
- g) Two earthing terminals.
- h) Auxiliary relays required for satisfactory operation.
- i) Motor contactor with thermal release
- j) Provision for mechanical interlock with isolator.
- k) Indication Lamps for On/OFF operation

3.12.0 SUPPORT STRUCTURES

3.12.1 The Circuit Breakers shall be suitable for mounting on steel structures.

3.12.2 The support structure shall be of steel hot dip galvanised type. The height of support structure shall be designed to keep the bottom most live part and bottom of insulators of circuit breakers at minimum clearance from the plinth as specified in data sheet.

3.12.3 All necessary galvanised bolts, nuts and washers to complete the erection shall be furnished including the embedded anchor bolts for securing the supporting structure to the concrete foundations.

3.12.4 **The support structures shall be capable to withstand the minimum seismic acceleration of 0.36 g in horizontal direction and 0.6g in vertical direction.**

3.13.0 NAME PLATES

3.13.1 All equipment shall have non-corrosive name plates fix at a suitable position indelibly mark with full particular there on in accordance with the standard adapted.

3.14.0 EARTHING

3.14.1 Two earthing pads shall be provided on each supporting structure. Each operating mechanism control cabinet or terminal box mounted on the supporting structure shall also be connected to an earthing pad. Separately mounted control cabinets shall be provided with two earthing pads adjacent to the base of the cabinet. The earthing connection shall be bolted type and suitable for receiving **75mm x 12mm GS strip**.

3.15.0 TERMINAL CONNECTORS

3.15.1 The equipment shall be supplied with required number of terminal connectors of approved type suitable for ACSR conductors. The type of terminal connector, size of connector, material, and type of installation shall be approved by the Employer, as per installation requirement while approving the equipment drawings.

3.16.0 TESTS

3.16.1 All routine tests shall be carried out in accordance with relevant IS. All routine/acceptance tests shall be witnessed by the AEGCLs authorised representative. The tests shall include the following:

- a) Routine/Acceptance Tests (all units) i) Mechanical Operation tests
- ii) Power frequency voltage withstand test (dry) iii) Tests on auxiliary & control circuits
- iv) Measurement of resistance of the main circuit.
- v) Insulation Resistance Test

b) Type Tests:

The bidder shall furnish type test certificates and results for the following tests along with the bid for breaker of identical design.

- i) Breaking (terminal fault, L90, etc) and making capacity test
 - ii) Short-time current withstand test
 - iii) Temperature rise tests
 - iv) Lightning Impulse voltage test
 - v) Operating Duty test
 - vi) Pole Discrepancy test
 - vii) Power Frequency withstand test
 - viii) IP degree of protection of operating mechanism enclosure
 - ix) RIV/PD test
 - x) Contact Resistance of CB
 - xi) IR value test for operating mechanism circuits
 - xii) Creepage distance test
- c) **Test Certificates**

Copies of routine/acceptance test certificates shall be produced with the endorsement of the inspecting authority to the Employer before effecting despatch. The test report shall contain the following information.

- i) Complete identification data, including serial No. of the breaker.
- ii) Method of application, where applied, duration and interpretation of results in each test.

3.17.0 PRE-COMMISSIONING TESTS

3.17.1 Contractor shall carry out following tests as pre-commissioning tests. Contractor shall also perform any additional test based on specialties of the items as per approved document of the equipment AEGCL without any extra cost to the AEGCL. The Contractor shall arrange all instruments required for conducting these tests along with calibration certificates and shall furnish the list of instruments to AEGCL for approval.

- (a) Insulation resistance of each pole.
- (b) Check adjustments, if any suggested by manufacturer.
- (c) Breaker closing and opening time.
- (d) Slow and Power closing operation and opening.
- (e) Trip free and anti-pumping operation.
- (f) Minimum pick-up voltage of coils.
- (g) Contact resistance measurement.
- (h) Functional checking of control circuits interlocks, tripping through protective relays and auto reclose operation.
- (i) Insulation resistance of control circuits, motor etc.
- (j) Resistance of closing and tripping coils.
- (k) SF6 gas leakage check.
- (l) Dew Point Measurement
- (m) Verification of pressure switches and gas density monitor.
- (n) Checking of mechanical 'CLOSE' interlock, wherever applicable.
- (o) Testing of grading capacitor.
- (p) Resistance measurement of main circuit.
- (q) Checking of operating mechanisms
- (r) Check for annunciations in control room.

3.18.0 SPECIAL TOOLS AND TACKLES

3.18.1 The Bidder shall furnish a list of any special tools and tackles required for maintenance and operation purposes with recommended quantities for each substation.

3.19.0 TECHNICAL DATA SHEET FOR CIRCUIT BREAKER

Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL

Sl. No.	Particulars	Unit	Data for 132kV CB
I	II	III	IV
1	Type		SF ₆
2	No of poles		3 (3 Phase Ganged Unit)
3	Service		Outdoor
4	Rated System Voltage	kV	132
5	Highest System Voltage	kV	145
6	System earthing		Solidly earthed system
7	Rated Voltage of Breaker	kV	145
8	Rated Continuous Current	Amps	3150
9	Rated Frequency	Hz	50
10	Rated Short Circuit breaking current (I) - 3secs - symmetrical	kA RMS	40
11	Rated Short Circuit making current	kA PEAK	2.5*1
12	Duty cycle		0-0.3 Sec - CO -3 Min -CO
13	First pole to clear factor		1.3
14	Operating time		
	i) Opening Time	ms	Not exceeding 50 ms
	ii) Closing Time D	ms	Not exceeding 100 ms
15	Insulation level i) One minute Power Frequency withstand Voltage (Dry) ii) Full Wave Impulse withstand Voltage (1.2/50 μsec)	kV RMS kV Peak	275 650
16	Minimum clearance between phases	mm	1300
17	Minimum clearance between phase to earth	mm	1300
18	Minimum Ground clearance (from bottom most live part to plinth level)	mm	4600
19	Minimum clearance from bottom of support insulator to plinth level	mm	2500
20	i) Minimum Creepage Distance (Total)	mm	4495
	ii) Minimum Creepage Distance (Protected)	mm	2250

Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL

Sl. No.	Particulars	Unit	Data for 132kV CB
I	II	III	IV
21	Operating mechanism		
	a) Type		Spring Charged
	b) Rated 3 Phase, 50Hz Voltage for Drive Motor	V	220AC
	c) Rated voltage of Shunt trip coil & operating range	V. DC	220 or 110 [50% - 110%]
	d) Rated voltage of Closing coil & operating range	V. DC	220 or 132 [80% - 110%]
	e) No. of trip coils	No	2 per CB
	f) No. of closing coils	No	1 per CB
	g) No of spare auxiliary contacts & contact rating	Nos AMPS	12 N/O+12 N/C (per CB) 10 A at 240V AC & 4A at 220V/ 110V DC
	h) Minimum thickness of steel sheet for control cabinet	mm	3
i) Enclosure Protection		IP55	
22	Reclosing		Three Phase auto reclosing
23	Support structure (Painted / Galvanised)		Galvanised
24	All other parts (Painted / Galvanised)		Synthetic enamel shade 631 of IS5 (125 microns)
25	Minimum size of control wiring (Copper)	Sq. mm	2.5
26	ITRV and TRV of CB interrupter		IEC

Section - 4

General Conditions of Supply and Erection of AEGCL

This Section 'General Conditions of Supply and Erection of AEGCL' supplementary to Section -5 'Special Conditions of Contract' of this document and [can be downloaded from www.aegcl.co.in](http://www.aegcl.co.in). Whenever there is a conflict, the provisions in SCC or the other Sections of this bid document shall prevail over those in the 'General Conditions of Supply and Erection of AEGCL'.

Section - 5

Special Conditions of Contract

5.1.0 DEFINITION OF TERMS

“Contract” means the Contract Agreement entered into between the Purchaser and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly.

“Contract Documents” means the documents listed in Article 1.1 (Contract Document) of the Contract Agreement (including any amendments thereto).

“Contract Price” means the price payable to the Contractor as specified in the Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

“Day” means calendar day

“Year” means 365 days.

“Month” means calendar month.

“Party” means the “Purchaser” or the “Contractor”, as the context requires.

“Purchaser” means the Assam Electricity Grid Corporation Limited (in short AEGCL) and its assignees.

The “Contractor” shall mean the tenderer / bidder whose tender/ bid has been accepted by the “Purchaser” and shall include the bidder’s legal representatives, successors and assignees.

“Goods” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Contractor is required to supply to the Purchaser under the Contract.

“Delivery” means the transfer of the Goods from the Contractor to the Purchaser in accordance with the terms and conditions set forth in the Contract.

“Completion” means the fulfilment of the Related Services by the Contractor in accordance with the terms and conditions set forth in the Contract.

“Related Services” means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other similar obligations of the Contractor under the Contract.

The “Specification” shall mean the “Purchaser’s Requirements”.

“Contractor” means the natural person, a company/firm, or a combination of these, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Contractor.

5.2.0 CONTRACT DOCUMENTS

5.2.1. Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

5.3.0 LEGAL JURISDITCTION

5.3.1. For any litigation arising out of the contract which cannot be resolve through mutual agreement or through Arbitration the Hon’ble Gauhati High Court will have sole jurisdiction of all settlement.

5.4.0 LANGUAGE

5.4.1. The ruling language of the Contract shall be English.

5.5.0 SCOPE OF WORK

5.5.1. The Goods and Related Services to be supplied shall be as specified in section 3- Purchaser's requirement and quantity as stated in Schedule No. 1 of Section -2, Bidding Forms.

5.5.2. **Unless otherwise stipulated in expressly limited in the Purchaser's Requirements, the Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Goods and Related Services as if such items were expressly mentioned in the Contract.**

5.6.0 DELIVERY SCHEDULE

5.6.1. Contract completion shall be **12(Twelve) months** from the date of signing of contract agreement.

5.6.2. The Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Article 3 of the Contract Agreement (Contract Forms) or within such extended time to which the Contractor shall be entitled under SCC **Clause 5.16.0** hereof.

5.7.0 CONTRACT PRICE

5.7.1. The Contract Price shall be as specified in **Article 2 (Contract Price)** of the Contract Agreement.

5.7.2. Unless an escalation clause is provided for in the **Article 2 (Contract Price)**, the Contract Price shall be a firm shall not subject to any alteration, except in the event of a Change in the scope or changes in applicable tax rates or as otherwise provided in the Contract.

5.8.0 TERMS OF PAYMENT

5.8.1. The contract price shall be paid as specified in subsequent sub-clauses, if not provided in Contract Forms, Section-6.

5.8.2. For payment against Supply and F&I:

Payment against supply of equipment and F&I shall be made as follows: -

1. Within 60 (sixty) days from the date of submission of the invoice against successful delivery, 80% (eighty percent) payment of the invoice value(without GST) would be made along with 100% GST on receipt and acceptance of materials in full and good condition.
2. In total 5 (five) Nos. of invoice/ bill would be entertained.
3. For payment upto 80% of the total contract value, maximum 4 (four) Nos. of progressive invoices/ bills would be entertained.
4. Final invoice/ bill of 20% would be entertained on completion work to the satisfaction of purchaser.

5.8.3. Documents required along with invoice: Following documents need to be submitted along with invoice –

- (i) Application for payment
- (ii) Contractor's invoice showing LOA reference, Goods description, quantity dispatched, unit reclamation price, total amount (6 Copies)
- (iii) Packing List
- (iv) Railway receipt/ LR
- (v) Manufacturer's guarantee certificate of Quality
- (vi) Material inspection Clearance Certificate for dispatch issued by Purchaser
- (vii) Insurance certificate.
- (viii) Physical verification certificate of material received at site by Purchaser/Purchaser's site representative.

5.8.4. ADVANCE PAYMENT

No advance payment is applicable for this contract.

5.9.0 PERFORMANCE SECURITY DEPOSIT

- 5.9.1. The successful bidder shall have to deposit to the extent of 10% (ten percent) of the Contract price as performance security (Bank Guarantee), within fifteen (15) days of receipt of notification of award (NoA), duly pledged in favor of the Managing Director, AEGCL and such security deposits shall be valid up to 60(sixty) days beyond the warranty period as per clause 5.11.3.
- 5.9.2. In the event of the successful bidder's quoted rate is determined to be ALB (Abnormally Low Bid), AEGCL at its discretion may increase the PBG amount from 10% (as stipulated in clause 5.9.1) upto a maximum of 20% of the contract Price.
- 5.9.3. In the event, the successful bidder contractor fails to submit the PBG within 15 days from the issue of NoA and AEGCL shall impose a penalty @ 0.1% per day of such delay. Such penalty shall be recovered from the amounts payable against the contract. However, this shall not entitle the successful bidder to delay submission of PBG and AEGCL shall retain the right to cancel the NoA for delay in submission of PBG.
- 5.9.4. If the Contractor fails or neglects to observe, perform any of his obligations under the contract, it will be lawful for the "Purchaser" to forfeit either in full or in part at his absolute discretion, the security deposit furnished by the Contractor.
- 5.9.5. No interest shall be payable on such deposits.

5.10.0 RETENTION MONEY

- 5.10.1. Deduction shall be as per payment terms clause no. 5.8.2.
- 5.10.2. No interest shall be payable on such deductions/retentions.

5.11.0 WARRANTY

- 5.11.1. The Contractor/Manufacturer warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 5.11.2. The Contractor/Manufacturer further warrants that the Goods shall be free from defects arising from any act or omission of the Contractor or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.
- 5.11.3. The warranty shall remain valid for **36 (Thirty-Six) months** from the date of successful and complete delivery of materials at the final destination indicated in the clause 1.8.0.
- 5.11.4. If during the Period Warranty any defect should be found, the Purchaser shall give Notice to the Contractor/Manufacturer stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Contractor/Manufacturer to inspect such defects.
- 5.11.5. If having been notified, the Contractor/Manufacturer fails to remedy the defect within a period of 15 (fifteen) days, the Purchaser may, following notice to the Contractor/Manufacturer, proceed to do such work, and the reasonable costs incurred by the Purchaser in connection therewith shall be paid to the Purchaser by the Contractor or may be deducted by the Purchaser from any monies due the Contractor or claimed under the Performance Security.

5.12.0 QUANTITY VARIATION

- 5.12.1. "Purchaser" shall have the right to increase/decrease the ordered quantity by 25% within 50 days of the period of completion and the same shall be carried out at the same rates /prices and terms and conditions stipulated in the contract except in regard to completion schedule, which shall be mutually agreed upon in case of enhancement of the ordered quantity.

5.13.0 INSPECTION AND TESTING

- 5.13.1. The Contractor shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in Sections 3, Purchaser's Requirements.
- 5.13.2. The inspections and tests shall generally be conducted on the premises of the Contractor/Manufacture. Subject to Sub-Clause 5.13.3, The Contractor shall furnish, all reasonable facilities and assistance, including access to drawings/process chart and production data to the inspectors at no charge to the Purchaser.
- 5.13.3. The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in SCC Sub-Clause 5.13.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
- 5.13.4. Whenever the Contractor is ready to carry out any such test and/or inspection, the Contractor shall give a reasonable advance notice (not less than 21 days) of such test and/or inspection and of the place and time thereof to the Purchaser. The Contractor shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- 5.13.5. The Contractor/manufacture shall provide the Purchaser with a certified report of the results of any such test and/or inspection.
- 5.13.6. The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Contractor shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to SCC Sub-Clause 5.13.4
- 5.13.7. If it is agreed between the Purchaser and the Contractor that the Purchaser shall not attend the test and/or inspection, then the Contractor may proceed with the test and/or inspection, and should provide the Purchaser with a certified report of the results thereof.
- 5.13.8. The Contractor agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to SCC Sub-Clause 5.13.5 & 5.13.7, shall release the Contractor from any warranties or other obligations under the Contract.

5.14.0 INSURANCE

- 5.14.1. The "Contractor" shall, have, unless, otherwise specified by the Purchaser, insure the materials through their underwrites at their cost and shall keep it insured against any loss/ damaged/ pilferage in transit, destruction or damage by fire/ flood, without exposure to vagaries of weather or through riot, civil commotion, war or rebellion, for the full value of the materials until the materials are received at the purchaser's destination store.
- 5.14.2. The "Contractor" shall be responsible for safe arrival at destination, unloading and receipt of the materials by the consignee. The Purchaser will discharge consignee's responsibilities only and shall not be responsible for any damage/ loss/ pilferage/ non-delivery by the carriers.
- 5.14.3. In case of any loss/ damage/ pilferage/ non-delivery/ short delivery by carriers etc.; the Contractor shall replace free of cost missing / damaged / lost materials within 30(thirty) days from the receipt of report thereof from the consignee(s) without waiting for settlement of their claims with their carriers / under-writers. Normally, such reports from the consignee(s) to the Contractor shall be initiated within a period of 30(thirty) days from the date of receipt of each consignment by him /them.
- 5.14.4. If it is considered necessary that the damaged equipment either in part or in full to be sent back to the manufacturer's works for repair, the manufacturer/ Contractor will furnish the Bank Guarantee for the full value of equipment needing repairs and such Bank Guarantee shall remain valid till such time, the equipment are repaired and returned to the consignee in good condition. The to and fro freight, handling and insurance charges in such cases will be borne by the Contractor.
- 5.14.5. Unless, otherwise mutually agreed upon, in case of failure by the Contractor to replenish /make good of the loss /damage /short supplied quantities, within the stipulated period, the Purchaser reserves the right to forfeit the security deposit and/ or adjust any outstanding payment to the "Contractor" with the Purchaser or take any other appropriate action.

5.15.0 FORCE MAJEURE

- 5.15.1. "Force Majeure" shall mean any event beyond the reasonable control of the Purchaser or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected, and shall include, without limitation, the following:
- (a) war, hostilities or warlike operations whether a state of war be declared or not, invasion, act of foreign enemy and civil war
 - (b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts
 - (c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority
 - (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine and plague
 - (e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster
 - (f) shortage of labor, materials or utilities where caused by circumstances that are themselves Force Majeure.
- 5.15.2. If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event.
- 5.15.3. The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with **SCC Clause 5.16.0**.

5.16.0 EXTENSION OF TIME FOR COMPLETION

- 5.16.1. The Time(s) for Completion specified in the Article 3 of the Contract Agreement (Contract Forms) shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:
- (a) any Change in the scope of works by the Purchaser; which justifies extension of completion time as provided in **SCC Clause 5.12.0**; and
 - (b) any occurrence of Force Majeure as provided in **SCC Clause 5.15.0**.
- 5.16.2. Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Purchaser's Representative a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Purchaser and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Purchaser's estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter to a Dispute Board, pursuant to **SCC Sub-Clause 5.19.0**.

5.17.0 LIQUIDATED DAMAGE

- 5.17.1. The Contractor guarantees that it shall attain Completion of the Works within the Time for Completion specified in the Contract Agreement pursuant to **SCC Sub-Clause 5.6.2**, or within such extended time to which the Contractor shall be entitled under **SCC Clause 5.16.0** hereof.
- 5.17.2. If the Contractor fails to attain Completion of the Works within the Time for Completion or any extension thereof under **SCC Clause 5.16.0**, the Contractor shall pay to the Purchaser liquidated damages at the rate

of **1% (one percent)** of the total Contract Price per week or part thereof delay. The aggregate amount of such liquidated damages shall in no event exceed **10% (ten percent)** of the total contract price.

However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Works or from any other obligations and liabilities of the Contractor under the Contract.

- 5.17.3. Once the aggregated "Liquidated damage" reaches 10% of the total contract price, the Purchaser may consider following actions:
- (a) Procure the undelivered material/ equipment and/or complete the balance works from elsewhere giving notice to the Contractor and to recover any extra expenditure incurred thereby for having to procure these materials and works at higher price, at the risk and responsibility of the Contractor; or
 - (b) Cancel the contract wholly or in part and to complete the works at the full risk and cost of the Contractor and forfeit the security deposit.
 - (c) Declare it as a "Contractual Failure" and act in accordance with **SCC Clause 5.18.0**.

5.18.0 CONTRACTUAL FAILURE

- 5.18.1. In the event of contractual failure of any respect on the part of the Contractor, the Purchaser shall be entitled to operate security deposit or any deposit or any payment due to Contractor irrespective of whether his default relates to the particular orders or not towards the Purchaser's claim for damages arising out of the failure. In addition, the Purchaser may black-list or bans the "Contractor" or pending enquiry, suspend him or take any other steps considered suitable.

5.19.0 ARBITRATION

- 5.19.1. If at any time, any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor in relation to or in connection with this contract, either party may, by written notice, refer the matter to the adjudication of a Sole Arbitrator to be appointed by mutual agreement of both parties in accordance with the Arbitration and Conciliation Act, 1996 and its amendments. The arbitration proceedings shall be held at Guwahati, or at any other place as may be decided by the Purchase.
- 5.19.2. The decision of the Sole Arbitrator shall be final and binding on both parties and the expenses of the arbitration shall be paid as may be determined by the Arbitrator. However, any dispute arising out of this contract will first be discussed and settled bilaterally between Purchaser and the Contractor.

Section 6 - Contract Forms

This Section contains the format for Notification of Award, the Contract Agreement and Appendices to the Contract Agreement which, once completed, will form the Contract along with the Section 4 and Section 5.

The Bidder should note that this Section shall be completed fully at the time of Contract signing.

[AEGCL's letter head]

Notification of Award

[date]

To: [Name and address of the Contractor]

This is to notify you that your Bid dated *[date]* for execution of the *[name of the work]* against *[Bid identification number]* for the Contract Price in the aggregate of Rupees *[amounts in numbers and words]* (as per Price Schedule-1), as corrected and modified in accordance with the Instructions to Bidders is hereby accepted, and it is decided to award on you the **“Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL”** covering inter-alia supply of all services specified in bidding document.

You are requested to furnish the Performance Security within fifteen (15) days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section 6 (Contract Forms) of the Bidding Document.

[Authorized Signature]
[Name and Title of Signatory]
Assam Electricity Grid Corporation Limited

Attachment: 1) Price schedule (with arithmetic correction if any)
2) Draft Contract agreement

STAMP

1. Contract Agreement
(Supply and related services Contract)

THIS AGREEMENT made the _____ day of _____, _____,

BETWEEN

Assam Electricity Grid Corporation Limited (herein after referred to as AEGCL or Purchaser), a corporation incorporated under the laws of Company Act, 1956 and having its registered office at First Floor, Bijuli Bhawan, Paltanbazar, Guwahati-781001, Assam and [**name of Contractor**], a firm/company incorporated under the laws of Company Act, 1956 and having its principal place of business at [**address of Contractor**] (hereinafter called "the Contractor").

WHEREAS AEGCL desires to engage the Contractor to the 'Ex-works Supply Contract' (also referred to as the 'First Contract') covering inter-alia supply of all equipment and materials for the complete execution of '**Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL**' as detailed in the Contract Document ("the Facilities"), and the Contractor has agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

Article 1
Contract Documents

- 1.1 **Contract Documents** (Reference SCC Clause 5.2.0)
The following documents shall constitute the Contract between the Purchaser and the Contractor, and each shall be read and construed as an integral part of the Contract:
- (a) This Contract Agreement and the Appendices hereto
 - (b) Letter of Price Bid and Price Schedules submitted by the Contractor
 - (c) Letter of Technical Bid and Technical Proposal submitted by the Contractor
 - (d) Special Conditions of Contract
 - (e) General Conditions of Supply and Erection.
 - (f) Specification (Purchaser's Requirements)
 - (g) Drawings (Purchaser's Requirements)
 - (h) Other completed Bidding Forms submitted with the Letters of Technical and Price Bids
 - (i) Guaranteed and other Technical Particulars (as submitted with the Bid).
 - (j) Any other documents shall be added here
- 1.2 **Order of Precedence** (Reference SCC Clause 5.2.0)
In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.
- 1.3 **Definitions** (Reference SCC Clause 5.1.0)
Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the SCC.

Article 2
Contract Price and
Terms of Payment

- 2.1 **Contract Price** (Reference SCC Clause 5.7.0)
The Purchaser hereby agrees to pay to the Contractor the Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall [. . . **amounts in rupees in words** . . .], [. . . **amounts in figures** . . .] as specified in Price Schedule No. 3 (Grand Summary).
The Contract Price is fixed.

- 2.2 **Terms of Payment** (Reference SCC Clause 5.8.0)
The terms and procedures of payment according to which the Purchaser will pay the Contractor are given in the Appendix (Terms and Procedures of Payment) hereto.
- Article 3**
Commencement Date and Completion Time
- 3.1 **Commencement Date** (Reference SCC Clause 5.6.1)
The Commencement Date upon which the period until the Time for Completion of the Works shall be counted from is the date when this Contract Document is signed.
- 3.2 **Completion Time** (Reference SCC Clause 5.6.2)
The whole works under the scope of this Contract shall be completed within **12(Twelve)** months from the date of signing of contract agreement.
- Article 4. Appendices**
- 4.1 The Appendices listed in the attached List of Appendices shall be deemed to form an integral part of this Contract Agreement.
- 4.2 Reference in the Contract to any Appendix shall mean the Appendices attached hereto, and the Contract shall be read and construed accordingly.

IN WITNESS WHEREOF the Purchaser and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by, for and on behalf of the
Purchaser

[**Signature**]

[**Title**]

in the presence of

[**Signature**]

[**Title**]

Signed by, for and on behalf of the
Contractor

[**Signature**]

[**Title**]

in the presence of

[**Signature**]

[**Title**]

APPENDICES

- Appendix 1 - Special Conditions of Contract
- Appendix 2 - Completion schedule (bar chart)
- Appendix 3 - Performance Security.
- Appendix 4 - Price Schedule.
- Appendix 5 - Guaranteed Technical Particulars

Supply of 132KV SF6 Gang Operated Circuit Breakers for Upper Assam Region of AEGCL

Appendix 4 - Form of Performance Security Bank Guarantee

(To be stamped in accordance with Stamp Act)
(The non-Judicial Stamp Paper should be in the name of issuing Bank)

Bank's Name:
Address of Issuing Branch or Office:
Email id and phone no for correspondence:

Beneficiary: Managing Director, AEGCL
Name and Address of Purchaser

Bid Security No.:

WHEREAS _____ [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of LoA No. _____ dated _____ to execute _____ [name of Contract and brief description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized/scheduled bank for the sum specified therein as security for compliance with its obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of _____ [amount of Guarantee] _____ [in words], such sum being payable in the currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of Guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

BG expiry date:
BG clam date:

Bank's seal and authorized signature(s)

NOTE

1. *All italicized text is for use in preparing this form and shall be deleted from the final document. An amount is to be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract.*
2. *This guarantee shall be valid upto 30 days beyond the Warranty Period as per the Contract.*
3. *For BG amount equal to or more than 50,000.00, BG should be signed by two bank officers to be valid.*
4. **Address of the banker with email and phone number for correspondence with banker should be clearly mentioned. Any correspondence related to the BG with the banker shall be made to the address mentioned in the BG.**