

STANDARD BIDDING DOCUMENT

SUPPLY AND DELIVERY OF ELECTRICAL COMMON ITEMS.

NIT No. MMD0039/2024 dated 07/03/2024 File No. DGPC/MMD/ECI/2024/150

These documents are meant for the exclusive purpose of bidding against this NIT and shall not be transferred, reproduced or otherwise used for purposes other than that for which they are specifically issued.



Contents

NOTICE INVITING TENDER	3
SECTION I: INSTRUCTIONS TO BIDDERS (ITB) – IN A SEPARATE DOC	CUMENT. 5
SECTION II. BID DATA SHEET	6
SECTION III: BIDDING FORMS	8
Form II: Bid Submission Form Form VI: Deviation Schedule Form VII: Price Schedule Form Form VIII: Technical Specifications (IF applicable) -As per Price Schedule	17 18
SECTION IV: GENERAL CONDITIONS OF CONTRACT (GCC)	21
IN SEPARATE DOCUMENT	21
SECTION V: SPECIAL CONDITIONS OF CONTRACT (SCC)	22
SECTION VI: CONTRACT FORMS	24
Form I: Contract Agreement Form II: Contract Performance Security	
Form III: Bank Guarantee for Advance Payment	





NOTICE INVITING TENDER

Material Management Division Druk Green Power Corporation Limited Phuentsholing

Domestic Competitive Bidder

For

Supply and Delivery of Electrical Common Items

NIT No: MMD0039/2024

Date: 07/03/2024

Material Management Division, DGPC invites sealed Bids from eligible national Bidders for the Supply and Delivery of **Electrical Common Items** s as per the scope of supply mentioned hereinafter.

1. Detailed specifications, scope of supply and terms and conditions are given in the Bidding Documents, which are available as per the schedule below:

Tender No. and date	MMD0039/2024 dated 07/03/2024
Document available period (date & time)	From 13/03/2024 to 05/04/2024
Bid submission (date & time)	Up to 05/04/2024 by 15:00hrs BST.
Pre-bid meeting (if any)	NA
Bid opening date, time & place	05/04/2024 at 15:30 hrs BST at MMD, Phuentsholing
Bidding Documents shall be available	www.drukgreen.bt

2. Issuance of Bidding Documents shall not automatically construe that the Bidder fulfils the Qualifying Requirements which shall be determined during Bid evaluation based on data/documents submitted by the Bidder.



- 3. Bids shall be submitted at the address given below and shall be opened in the presence of Bidder's representatives who choose to attend.
- 4. All Bids must be accompanied by Bid Security for an amount of BTN. 129,000.00 (One Hundred Twenty Nine Thousand) only in the form of Demand Draft /Cash Warrant /Banker's Cheque/Bank Guarantee enforceable by any financial institutions in Bhutan, and shall remain valid till 04/07/2024 in favour of Material Management Division, DGPC. Purchaser may also accept cash deposit through bank transfer in expectational circumstances.
- 5. Qualification Requirement for Bidders shall be as specified in the BDS.
- 6. Bid Documents are not transferrable. The Purchaser reserves the right to accept or reject any Bid partly or fully or cancel the bidding process without assigning any reasons thereof and in such case no Bidder/ intending Bidder shall have any claim arising out of such action of the Purchaser.
- 7. Address for bid submission:

Head, Material Management Division, Phuentsholing. Telephone: 05-254465



SECTION I: INSTRUCTIONS TO BIDDERS (ITB) - In a separate document



SECTION II. BID DATA SHEET

ITB	Particulars	
1.1	The Purchaser is: Material Management Division, DGPC, Phuentsholing	
8.2	For Bid clarification purposes, the Purchaser's address is: Attention: [Chimi Rinzin] Address: Material Management Division, Phuentsholing Phone number: +975 5 254382 Electronic mail: c.rinzin840@drukgreen.bt	
8.3	Bid Clarification request will be received on or before: Time: 15:30 Hrs BST Date: 31/03/2024	
8.5	A pre-bid meeting "shall not" take place.	
10.1	The language of bid is: English	
12.1(i)	The Bidder shall submit with its Bid the following additional documents: a) Copy of Valid Trade License /Certificate of Incorporation b) Latest Tax Clearance Certificate c) Bid Submission Form	
14.3	The Bidder shall quote prices: CIP. MMD Store, Phuentsholing	
14.3 (a) & b)	The final destination is: MMD Store, Phuentsholing.	
14.5	Bids are being invited for [INDIVIDUAL ITEM]	
15.1	The prices quoted by the Bidder "shall not" be adjustable.	
16.1	The Bidder shall quote in BTN	
17.1	The Bid validity period shall be 60 days from the date of bid opening i.e., up to 04/06/2024 .	
18.1	The Bidder shall furnish a bid security in the amount of BTN 129,000.00 shall be valid up to 04/07/2024.	
19.1	Alternative Bids "shall not" be permitted.	
20.3	The period of time for which the Goods are expected to be functioning (for the purpose of spare parts, special tools, etc.) is [NOT APPLICABLE]	
21.1	Financial Capability The Bidder shall furnish documentary evidence that it meets the financial requirement(s): [NOT APPLICABLE]	
21.2	Experience and Technical Capacity	
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	The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s): [NOT APPLICABLE]	
21.3(a)	Manufacturer's authorization "is not" required.	
21.3(b)	After sales maintenance, repair, spare parts stocking and related service "are not" required, and the Bidder therefore "is not" required to be represented by a suitably equipped and able agent in Bhutan.	
21.3 (c)	Joint Venture/Consortium (JV/C) Bids are permitted [NO]	
22.1&24.1	In addition to the original Bid, the number of copies is: [NOT REQUIRED]	
24.2 (b)	For bid submission purposes only, the Purchaser's address is: Head, Material Management Division, Phuentsholing. Telephone: 05-254465 E-mail: <u>s.pema1815@drukgreen.bt</u>	
24.8	Bidders "shall not" have the option of submitting their Bids electronically.	
25.1	The deadline for the submission of Bid is: 05/04/2024 15:00 hrs. Bhutan time.	
28.1	The Bid Opening shall take place at: Address: Material Management Division, Office Date: 05/04/2024 Time: 15:30 hrs, Bhutan Time	
36.3	Evaluation will be done for [ITEM WISE]	
36.3 (e)	The adjustments shall be determined using the following criteria: [NOT APPLICABLE]	
36.6	Bidders "shall" be allowed to quote prices for one or more lots.	
38.1	A margin of Domestic Preference "shall not" apply.	
43.	The successful Bidder shall submit the contract performance security and sign the	
	Contract within 15 days from the date of issuance of NOA.	
44.	Signing of contract shall be within 15 days from the date of issuance of NOA.	



SECTION III: BIDDING FORMS



Form I: Bidder's Information Form

The Bidder shall fill in this Form in accordance with the instructions indicated below. Date: [insert date (as day, month and year) of Bid submission] Tender No.: **MMD0039/2024**

1. Bidder's Legal Name[insert name]
2. In case of Joint Venture/ Consortium (JV/C) legal name of each member:
[insert V/C]
3. Bidder's or each member of JV/C 's Country of Registration:
[insert Country of Registration]
4. Bidder's or each member of JV/C 's Year of Registration:
5. Bidder's or each member of JV/C 's Legal Address in Country of Registration
6. Bidder's or each member of JV/C 's Authorized Representative Information (if applicable)
Name and identity No.:
Representative's name and identity No.]
Address: [insert Authorized
Representative's address]
Telephone/mobile No.:
contact No.]
E-mail Address:[insert Authorized Representative's email]
Attached are copies of the following original documents:
[check the box(es) of the attached original documents]
Articles of Incorporation or Registration of firm or valid Trade license named in 1 above,
In the case of a JV/C letter of intent to form the JV/C or the JV/C agreement
In the case of a government owned entity from Bhutan, documents establishing legal and
financial autonomy and compliance with commercial law
Power of attorney authorizing the signatory of the Bid to sign on behalf of the Bidder.
Latest Tax clearance certificates.



Form II: Bid Submission Form

[The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.]

To: Material Management Division, DGPC, Phuentsholing.

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: *[insert the number and date of issue of each addendum]*;
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the SCC the following Goods and Related Services: [insert a brief description of the Goods and Related Services];
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is: [insert the Bid Price in words and figures, indicating the various amounts and their respective currencies] [in case of single stage, two envelopes, this clause (c) and (d) shall not be applicable];
- (d) The discounts offered and the methodologies for their application are:

Discounts. If our Bid is accepted, the following discounts shall apply: [Specify in detail each discount offered and the specific item of the Schedule of Supply to which it applies.]

Methodology of Application of the Discounts. The discounts shall be applied using the following methodology: [Specify in detail the methodology that shall be used to apply the discounts];

- (e) Our Bid shall be valid for a period of [insert number] from the date fixed for the Bid submission deadline in accordance with ITB Sub-Clause 26.1, and it shall remain binding upon us and may be accepted at any time before expiry of that period;
- (c) If our Bid is accepted, we commit to provide a Performance Security in accordance with ITB Clause 45 and GCC Clause 16 for the due performance of the Contract;
- (d) We are not participating, as Bidders, in more than one Bid in this bidding process, other than any alternative offers submitted in accordance with ITB Clause 15;



- (e) We, including any subcontractors or suppliers for any part of the Contract, have nationality from eligible countries, viz: [insert the nationality of the Bidder, including that of all parties that comprise the Bidder if the Bidder is a JV/C, and the nationality each subcontractor and supplier]
- (f) We have no conflict of interest pursuant to ITB Sub-Clause 3.2;
- (g) Our firm, its affiliates or subsidiaries including any subcontractors or suppliers for any part of the contract has not been declared ineligible by the Purchaser under the laws or official regulations of Bhutan, in accordance with ITB Sub-Clause 3.4;
- (h) We have read the ITB and GCC carefully, understood and agree to comply with all the clauses which are mentioned therein. In case of any breach of any condition on our part, we shall be liable for actions as per terms and conditions of the Contract.
- We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (j) We accept the Vendor Performance Management System.

We understand that you are not bound to accept the lowest evaluated Bid or any other Bid that you may receive.

Signed: *[insert signature of person whose name and capacity are shown]*

In the capacity of[insert legal capacity of person signing the Bid Submission Form]



Form III: Bid Security (Bank Guarantee)

[The Bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[insert Bank's Name, and Address of Issuing Branch or Office]

Tender No.

Beneficiary:	. [Name and Addre	ss of Purchaser]
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Date:

BANK GUARANTEE No.:

[insert amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the Bid conditions, because the Bidder:

(a) has withdrawn its Bid during the period of Bid validity specified by the Bidder in the Form of Bid;

or

(b) having been notified of the acceptance of its Bid by the Purchaser during the period of Bid validity, (i) fails or refuses to execute the Contract Form; or (ii) fails or refuses to furnish the Performance Security, if required, in accordance with the Instructions to Bidders.

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copy of the contract signed by the Bidder and the Performance Security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful Bidder, upon receipt of notification of being unsuccessful bidder from the purchaser; or thirty days after the expiration of the Bidder's Bid. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

[signature(s)]



[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so, indicated in the BDS.]

Date: [insert date of Bid Submission]

Tender No.: [insert tender number] <u>Alternative No.: [insert identification No if this is a Bid for an alternative]</u>

To: [insert complete name of the Purchaser]

WHEREAS

We [insert complete name of the Manufacturer], who are official manufacturers of [insert type of Goods manufactured], having factories at [insert full address(es) of the Manufacturer's factory/ies], do hereby authorize [insert complete name of Bidder] to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us, namely [insert name and/or brief description of the Goods], and subsequently to negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with GCC Clause 28 with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of the authorized representative(s) of the Manufacturer]

Title: [insert title(s) of the authorized representative(s) of the Manufacturer]

Duly authorized to sign this Authorization for and on behalf of [insert complete name of the Bidder]

Dated on the [insert number] day of [insert month], [insert year].



Form V: Integrity Pact

This agreement should be a part of the tender document, which shall be signed and submitted along with the tender document. The head of employing agency/or his authorized representative should be the signing authority. For the Bidders, the Bidder himself or his authorized representative must sign the Integrity Pact (IP).

1 General:

Whereas **Thinley Penjor**, representing the Material Management Division, Procurement Unit, Royal Government of Bhutan, hereinafter referred to as the **"Employer"** on one part, and(*Name of bidder or his/her authorized representative, with power of attorney*) representing M/s.(*Name of firm*), hereinafter referred to as the **"Bidder"** on the other part hereby execute this agreement as follows:

This agreement shall be a part of the standard bidding document, which shall be signed by both the parties at the time of purchase of bidding documents and submitted along with the tender document. This IP is applicable only to "**large**" scale works, goods and services, the threshold of which will be announced by the government from time to time. The signing of the IP shall not apply to framework contracting such as annual office supplies etc.

2 **Objectives:**

Whereas, the Employer and the Bidder agree to enter into this agreement, hereinafter referred to as IP, to avoid all forms of corruption or deceptive practice by following a system that is fair, transparent and free from any influence/unprejudiced dealings in the **bidding process**¹ and **contract administration**², with a view to:

- 2.1 Enabling the Employer to obtain the desired contract at a reasonable and competitive price in conformity to the defined specifications of the works or goods or services; and
- 2.2 Enabling bidders to abstain from bribing or any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also refrain from bribing and other corrupt practices.

3. Scope:

The validity of this IP shall cover the bidding process and contract administration period.

4. Commitments of the Employer:

The Employer Commits itself to the following: -

4.1 The Employer hereby undertakes that no officials of the Employer, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through



intermediaries, any bribe, consideration, gift, reward, favor or any material or immaterial benefit or any other advantage from the Bidder, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process and contract administration.

- 4.2 The Employer further confirms that its officials shall not favor any prospective bidder in any form that could afford an undue advantage to that particular bidder in the bidding process and contract administration and will treat all Bidders alike.
- 4.3 Officials of the Employer, who may have observed or noticed or have reasonable suspicion shall report to the head of the employing agency or an appropriate government office any violation or attempted violation of clauses 4.1 and 4.2.
- 4.4 Following report on violation of clauses 4.1 and 4.2 by official(s), through any source, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings shall be initiated by the Employer and such a person shall be debarred from further dealings related to the bidding process and contract administration.

5. Commitments of Bidders

The Bidder commits himself/herself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of the bidding process and contract administration in order to secure the contract or in furtherance to secure it and in particular commits himself/herself to the following: -

- 5.1 The Bidder shall not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Employer, connected directly or indirectly with the bidding process and contract administration, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding process and contract administration.
- 5.2 The Bidder shall not collude with other parties interested in the contract to manipulate in whatsoever form or manner, the bidding process and contract administration.
- 5.3 If the bidder(s) have observed or noticed or have reasonable suspicion that the provisions of the IP have been violated by the procuring agency or other bidders, the bidder shall report such violations to the head of the procuring agency.

6. Sanctions for Violation:

The breach of any of the aforesaid provisions shall result in administrative charges or penal actions as per the relevant rules and laws.

6.1 The breach of the IP or commission of any offence (forgery, providing false information, mis-representation, providing false/fake documents, bid rigging, bid steering or coercion) by



the knowledge of the Bidder), shall be dealt with as per the terms and conditions of the contract and other provisions of the relevant laws, including De-barment Rules.

6.2 The breach of the IP or commission of any offence by the officials of the procuring agency shall be dealt with as per the rules and laws of the land in vogue.

7. Monitoring and Administration:

- 7.1 The respective procuring agency shall be responsible for administration and monitoring of the IP as per the relevant laws.
- 7.2 The bidder shall have the right to appeal as per the arbitration mechanism contained in the relevant rules.

We, hereby declare that we have read and understood the clauses of this agreement and shall abide by it.

The parties hereby sign this Integrity Pact at (place) _____ on (date) _____

Affix Legal Stamp	Affix Legal Stamp
EMPLOYER	BIDDER/REPRESENTATIVE
CID: 1 2 0 0 6 0 1 0 6 0	D:
Witness:	Witness:
Name: Chimi Rinzin EE (E), MMD	Name:



Form VI: Deviation Schedule

The Bidder shall specify below, in detail, all deviations from and exceptions to the Bid Document. Any entry shall be referenced to the clause to which they refer.

The Bidder shall be deemed to be compliant with the content and intent of the Bid Document except in respect of deviations and exception listed in this Schedule.

Clause No.	Details of Deviation/ Exception	Reasons for Deviation/ Exception

In case of NO DEVIATION mentioned here and deviation of clauses/specification is mentioned elsewhere, then it will be taken as a deviation.

Signature of Bidder _____

Place & Date _



Form VII: Price Schedule Form

[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated]

Sl. No.	Description of Goods	Place of origin	Quantity	Unit	Unit Price (BTN)	Total Price (BTN)
	Price Schedule attached					
Total Price						

Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [insert date]



Price Schedule - Related Services- If applicable

SN	Description of Services	Quantity	Unit	Unit Price	Total Price (BTN)
				(BTN)	

Total Bid Price

Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [insert date]



19

Form VIII: Technical Specifications (If applicable) -As per Price Schedule attached

Item No	Name of Goods or Related Service	Technical Specifications and Standards

Drawings

These Bidding Documents include "No" drawing. Or as per Price Schedules



SECTION IV: GENERAL CONDITIONS OF CONTRACT (GCC) -

IN SEPARATE DOCUMENT



SECTION V: SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) shall supplement and/or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the *(GCC)*.

Reference to	the GCC is made as under:
1.1.18	Final Destination(s) is: Store, Material Management Division, DGPC, Phuentsholing
1.1.19	The Purchaser is: Material Management Division, DGPC, Phuentsholing
1.3.5 (a)	The meaning of the trade terms shall be as prescribed by Incoterms. If the meaning of any trade term and the rights and obligations of the parties there under shall not be as prescribed by Incoterms, they shall be as prescribed by: [Incoterm 2020]
1.3.5(b)	The term CIP and other similar terms shall be as per the version of Incoterms 2020.
1.5.1	The language shall be "English"
1.7.1	For notices, the addresses shall be: For the Purchaser: Attention: Chimi Rinzin Address: Material Management Division, Procurement Unit, DGPC Telephone: 00975 05 254386 E-mail address: <u>c.rinzin840@drukgreen.bt</u>
3.2.1	The amount of the Performance Security shall be 10% of the contract value, if each contract value is above Nu. 0.50 Million prior to signing of contract. OR In case of contract value up to Nu.0.50 million, the purchaser shall retain 10% of contract value in place of performance security against each supply. The retention money/performance security shall be released within 30 days from the date of completion of warranty period (if applicable), or within thirty (30) days from the date of complete delivery of all items.
3.2.3	 The types of acceptable Performance Securities and validity are: (a) Performance security: (i) Unconditional bank guarantee issued by a reputable financial institution acceptable to any banks in Bhutan, in the form provided for in the Contract or in any other form acceptable to the purchaser: (ii) Cash warrant, or (iii) Demand Draft or (as applicable) (b) Validity of performance security: The Performance Security shall be valid thirty (30) days beyond the successful completion of the Supplier's performance obligations under the Contract, including the completion of the warranty period under the
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	 Contract and for any extension thereto. It shall serve as a guarantee that the Supplie will perform his contractual obligations under the Contract till the warranty period. (c) Bidder shall submit Performance Security separately for Druk Green Powe Corporation and Dagachhu Hydro Power Corporation.
3.3.1	Subcontracting shall be "not allowed".
5.2.1	The inspections and tests shall be: In case of any anomalies during test/ check, decision made by the end-user shall be final and binding.
5.2.2	Inspections and tests shall be conducted at: Final point of delivery.
6.1.1	The time for Delivery shall be 90 days from date of notification of award or purchase order. Details of Shipping and other Documents to be furnished by the Supplier are: Invoice & Challan, etc. (Signed with Company Seal).
6.3.1	The applicable rate for liquidated damages for delay shall be 0.30% per day of delay with a maximum of 10% (ten) percent of the total value of the delayed goods or unperformed services
7.1.3	The warranty shall be valid for 365 days after the goods have been delivered and accepted at the final destinations (BHP, CHP, CO, HRDC, KHP, THP, MHP, DHPC) or as per manufacturer's warranty period.
7.1.4 & 7.1.5	The period for repair or replacement shall be: 30 days.
9.1.1 a)	The prices charged for the Goods supplied and the related Services performed "shall not be adjustable.
9.2.1	Terms of payment shall be: 100% payment shall be made promptly by DGPC, no later that thirty (30) days after the receipt of goods along with invoices and documents in accordance with GCC 9.2.2. Provided that the documents are compliant with all the requirements of DGPC. In case of incomplete/ non-compliant invoices and documents, DGPC shall ask the Supplier to re-submit the invoices and documents with full compliance.
9.3.4	Tax Deducted at Source (TDS) from Bhutanese Bidders shall be "2 %" from the gross amount of bills.
13.1.1	Responsibility for transportation of the Goods shall be as specified in the Incoterms.
13.2.2	The packing, marking and documentation within and outside the packages shall be as per GCC 13.2.
14.1.1	The insurance coverage shall be as specified in the Incoterms 2020.
15.1.2	Contract with a Bhutanese Supplier: In the case of a dispute between the Purchaser and a Bhutanese Supplier, the dispute shall be referred to adjudication or arbitration in accordance with Alternative Dispute Resolution Act of Bhutan 2013.
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SECTION VI: CONTRACT FORMS



Form I: Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS AGREEMENT is made on the [insert number] day of [insert month], [insert year],

BETWEEN

[insert complete name of Purchaser], a Purchaser registered under the the laws of Bhutan and having its principal place of business at *linsert address of Purchaser* (hereinafter called "The Purchaser"), and

----- [insert name of Supplier], incorporated under the laws of

[insert country of Supplier] and having its principal place of business at [insert address of Supplier (hereinafter called "the Supplier").

WHEREAS the Purchaser invited Bids for certain Goods and related services, viz., [insert brief description of Goods and Services] and has accepted a Bid by the Supplier for the supply of those Goods and Services for a total sum of [insert Contract Price in words and figures, expressed in the Contract currency/ies] (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
- 2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract, viz.:
 - This Contract Agreement; (a)
 - (b) Performance Security;
 - Integrity Pact; (c)
 - The Purchaser's Notification of Award of Contract; (d)
 - Minutes of Contract Negotiation Meeting (if any); (e)
 - (f) The Special Conditions of Contract;
 - The General Conditions of Contract; (g)
 - Technical Requirements (including Schedule of Supply and Technical Specifications.) (h)
 - The Supplier's Bid and original Price Schedules; (i)
 - (h) [Insert here any other document(s) forming part of the Contract]
- 3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and 03/204

Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Related Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Bhutan on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: [*insert signature, affix legal stamp*] in the capacity of [*insert title or other appropriate designation*]

in the presence of [insert signature] [insert identification of official witness]

For and on behalf of the Supplier

Signed: [insert signature of authorized representative(s) of the Supplier, affix legal stamp] in the capacity of [insert title or other appropriate designation]

in the presence of [insert signature] [insert identification of official witness]



Form II: Contract Performance Security

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

Date: [insert date (as day, month, and year) of Bid submission] Tender No. [insert tender number] Name of the Tender: [insert name of the tender]

Bank's Branch or Office: [insert complete name of Guarantor]

Beneficiary: [insert complete name of the Purchaser]

PERFORMANCE GUARANTEE No.: [insert Performance Guarantee number]

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum(s) not exceeding *[insert amount(s)¹ in figures and in words]* upon receipt by us of your first demand in writing declaring the Supplier to be in default under the Contract, without cavil or argument, or you needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This Guarantee shall expire no later than the *[insert day/ month/ year]*,² and any demand for payment under it must be received by us at this office on or before that date. We agree to a one-time extension of this Guarantee for a period not to exceed *[six months]/[one year]*, in response to the Purchaser's written request for such extension, such request to be presented to us before the expiry of the Guarantee.

[signatures of authorized representatives of the bank and the Supplier]

¹ The Bank shall insert the amount(s) specified in the SCC and denominated, as specified in the SCC, either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Purchaser.

² Date established in accordance with Clause 16.4 of the General Conditions of Contract ("GCC"). The Purchaser should note that in the event of an extension of the time to perform the Contract, the Purchaser would need to request an extension of this Guarantee from the Bank. Such request must be in writing and must be made prior to the expiration date established in the Guarantee.



Form III: Bank Guarantee for Advance Payment

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated.]

Date:	[insert date (as day, month, and year) of Bid submission]
Tender No	
Name of the Tender:	[insert name of the tender].
Bank's Branch or Office	complete name of Guarantor]

ADVANCE PAYMENT GUARANTEE No.: [insert Advance Payment Guarantee no.]

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert amount(s)¹ in figures and words]* upon receipt by us of your first demand in writing declaring that the Supplier is in breach of its obligation under the Contract because the Supplier used the advance payment for purposes other than toward delivery of the Goods.

It is a condition for any claim and payment under this Guarantee to be made that the advance payment referred to above must have been received by the Supplier in its account *[insert account number and domicile of the account]*

This Guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until *[insert date²]*. We agree to a one-time extension of this Guarantee for a period not to exceed *[six months]/[one year]*, in response to the Purchaser's written request for such extension, such request to be presented to us before the expiry of the Guarantee.

² Insert the Delivery date stipulated in the Contract Delivery Schedule. the Purchaser should note that in the event of an extension of the time to perform the Contract, the Purchaser would need to request an extension of this Guarantee from the bank. Such request must be in writing and must be made prior to the expiration date established in the Guarantee.



[[]signature(s) of authorized representative(s) of the bank]

¹ The bank shall insert the amount(s) specified and denominated in the Notification of Award,

PRICE SCHEDULE

	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
1	EMCICOCO 2000002489	Contactor, 220V AC, type 3TH82-53E-OA	3	0	3	NO				Siemens/ Equivalent or Higher	
2	EMCICOCO 2000002546	Power contactor, type 3TF 48	2	0	2	NO				Siemens/ Equivalent or Higher	
3	EMCICOCO 2000002567	Contactor Telemecanique LC1 F330	2	0	2	SET				Schneider/ Equivalent or Higher	
4	EMCICOSP 2000002579	Contacts kit for contactor - 3TF4400A	4	0	4	NO				Siemens/ Equivalent or Higher	
5	EMCIPMPM 2000002611	Potentiometer, 10K, 3 W	4	0	4	NO				Panjak/ Equivalent or Higher	
6	EMCICACA 2000002728	Capacitor, 20MFD, 250V AC	150	0	150	NO				Universal/ Equivalent or Higher	
7	EMCITATA 2000002755	DC Voltage transducer, input: o-6omV DC, output: o-1oV DC, type TRA-430	2	0	2	NO				Rishcon/ Equivalent or Higher	
8	EMCISWLI 2000002945	Level regulator switch, type ENM 10, density 0.80-0.95, Cable Length 20Mtrs.	3	0	3	NO				Xylem/ Equivalent or Higher	



	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
9	EMCISWCO 2000003016	TNC switch, BCA-02-P006- KI44, 25A,660VAC	3	0	3	NO				KAYCEE/ Equivalent or Higher	
10	EMCISWCO 2000003022	Threshold switch, MCR/SWS/1, 4-20mA, MODLE:MINI MCR-2-RTD-UI Ord No. 29 02 04 9	70	0	70	NO				Phoenix contact/ Equivalent or Higher	
11	EMCIHEHE 2000003030	Space heater, 80W, 240V	5	0	5	NO				Girish/ Equivalent or Higher	
12	EMCIMEME 2000003039	Ammeter, 0-25A 50Hz,	1	0	1	NO				AE/ Equivalent or Higher	
13	EMCIMEME 2000003074	Ammeter, o - 400A, 400/5A, c l- 1.0	2	0	2	NO				AE/ Equivalent or Higher	
14	EMCICLCL 2000003298	Stainless steel hose clamp ¾"	20	0	20	NO				Jindal/ Equivalent or Higher	
15	EMCIRTRT 2000004466	RTD sensor, S-02, 3wire, PT- 100 type, Resistance at 0 deg.C - 100 ohms, Resistance at 1000C - 138.50 ohms, Lead length - 7.5 mtrs., No. of elements - double	8	0	8	NO				PECON/ Equivalent or Higher	
16	EMCICOCO 2000004756	Power contactor, AV1- 32,20HP,15KW, 415VAC, 50HZ, ItH:40A, Ui:690V, Aux. Contact: AC 15,3A,240V	5	0	5	NO				Schneider/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
17	EMCICOCO 2000004864	Contactor-3TF47, coil volt- 230VAC	6	0	6	NO				Siemens/ Equivalent or Higher	
18	EMCIAILH 2000005182	Annun. indicator: UC625- 28RD-HH-024D-R, Specifications: Supply-1: 88- 360VDC/88-265VAC, Supply-2: 88- 360VDC/88-265VAC, LED: red, Channels 1-28	1	O	1	NO				Eaton MTL-RTK instruments/ Equivalent or Higher	
19	EMCIMEME 2000005206	Voltmeter, o-400V DC, 144sq.mm, Acc. 1%, 90 deg FSD	2	0	2	NO				AE/ Equivalent or Higher	
20	EMCISWCO 2000005209	AC Voltmeter Sel. Sw.; 16A, 2P, 3 way with OFF	4	0	4	NO				AE/ Equivalent or Higher	
21	EMCIAILH 2000005253	LED indication lamp, 220 VDC, red	10	0	10	NO				Siemens/ Equivalent or Higher	
22	EMCIAILH 2000005254	LED indication lamp, 220 VDC yellow	10	0	10	NO				Siemens/ Equivalent or Higher	
23	EMCIAILH 2000005255	LED indication lamp, 220 VDC, blue	10	0	10	NO				Siemens/ Equivalent or Higher	
24	EMCIAILH 2000005256	Indication lamp, 220V AC/DC, LED type, White.	40	0	40	NO				Delcon/ Equivalent or Higher	



	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
25	EMCICOCO 2000005654	Automatic star-delta starter,415v, 30HP, Type: 3TE04942A.	2	0	2	NO				L&T/ Equivalent or Higher	
26	EMCISWLI 2000006127	Proximity sensor: NBN40-U1- E2, 24V DC, rectangular, part no. 194779	2	0	2	NO				Peperl +Fuchs/ Equivalent or Higher	
27	EMCISWLI 2000006128	Proximity sensor: NBN8- 18GM50-E2, 24V DC, cylindrical, current: 0 - 200 mA, size:8mm, non-flush type	2	0	2	NO				M/s. Andritz/ Equivalent or Higher	
28	EMCISWLI 2000006129	Switching Mode Power Supplies (SMPS), Input: 110/230V AC, O/P: +24V DC, 4.5A, Model: EPS-100-24	2	0	2	NO				ESSEN/ Equivalent or Higher	
29	EMCICOSP 2000006249	Aux.Contact:3TY7 561-1B, No NCNC, 4432314	3	0	3	NO				Siemens/ Equivalent or Higher	
30	EMCICOCO 2000006255	Contactor: Type: RL4RA022T, Iyh=20A, 415V,	16	0	16	NO				GE/ Equivalent or Higher	
31	EMCIMEME 2000006392	Voltmeter, 0-500V AC	2	0	2	NO				AE/ Equivalent or Higher	
32	EMCICOCO 2000006416	Air break contactor:3TH30- 22–OB, 2NO+2NC	5	0	5	NO				Siemens/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
33	EMCICOCO 2000006417	Air break contactor:3TH30-22- OA, 2NO+2NC	5	0	5	NO				Siemens/ Equivalent or Higher	
34	EMCICOSP 2000006431	Aux. block: 3TX4010-2A, 1NO, IS:13947, Aux. Block; 3TX4010 – 2A 1NO; IS: 13947 IEC 60947	10	0	10	NO				Siemens/ Equivalent or Higher	
35	EMCICOCO 2000006568	Contactor, 3TF44, 110V	2	0	2	NO				Siemens/ Equivalent or Higher	
36	EMCIAILH 2000006586	Indication lamp, 230V AC/DC (Green)	50	0	50	NO				Delcon/ Equivalent or Higher	
37	EMCISWCO 2000006591	Aux. contactor: RL4+RMLF, 3NO+3NC, 220VDC, Aux. contactor with mechnical latch, 3NO+3NC.Coil 220V DC. Latch coil 220V DC. RL4+RMLF.	8	0	8	NO				GE/ Equivalent or Higher	
38	EMCIMEME 2000006690	Ammeter, 72mm2, 0-200A AC, CL-1.5	5	0	5	NO				AE/ Equivalent or Higher	
39	EMCISWLI 2000006788	Limit switche: IP67, 2NO+2NC, Limit switches with angular roller lever, Snap Action 2 NO+NC, IP67	2	0	2	NO				Jai Balaji & Co./ Equivalent or Higher	



_	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
40	EMCICOSP 2000006874	Aux. block: 3TX4001-2A 1NC, IS:13947, Aux. Block; 3TX4001 – 2A 1Nc; IS: 13947 IEC 60947	10	0	10	NO				Siemens/ Equivalent or Higher	
41	EMCISWLI 2000006955	Proximity Sensor	4	0	4	NO				PEPPERL/+FUCHS/ Equivalent or Higher	
42	EMCISWLI 2000007197	Thermostat switch: DMO1140, o-60°C, 6A, Thermostat switch, Type: DMO1140, Specification: o- 60°C, 6A, 250VAC	4	0	4	NO				Demex/ Equivalent or Higher	
43	EMCISWLI 2000007198	Thermostat switch, 30-85°C, class:11, E.G.O +CM/L-7153262, IS:3017	5	0	5	NO				VKS/ Equivalent or Higher	
44	EMCICOCO 2000007385	Power contactor, AV1-0910, 9A. 415V AC, Coil: 220-240V AC	5	0	5	NO				Schneider/ Equivalent or Higher	
45	EMCICOSP 2000007392	Add on contact block, 2NO+2NC, AVC-22	10	0	10	NO				Schneider/ Equivalent or Higher	
46	EMCICOCO 2000008015	Air break contactor:3TF34-00- 0A, 415 AC	2	0	2	NO				Siemens/ Equivalent or Higher	
47	EMCICOCO 2000008021	Contactor: 3TF46, 220-660V, 20-52HP	5	0	5	NO				Siemens/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
48	EMCIAILH 2000008560	LED indication lamp, 220V AC, red	100	0	100	NO				Delcon/ Equivalent or Higher	
49	EMCIMEME 2000008636	ABT Energy meter: ER300P, 3P, 4w, Ib:5A, Imax : 6A, 3 X 63.5V, Pulse rate: 10 Imp/ Wh & 10 Imp/VArh, Class: 0.2S for Active 0.5S for Reactive, Fre: 50Hz.	1	0	1	NO				Actaris/ Equivalent or Higher	
50	EMCICOCO 2000008935	Air breakcontactor,3TF31-10- OA,	5	0	5	NO				Siemens/ Equivalent or Higher	
51	EMCIAILH 2000008944	Indicator LED (RED),3SB5285- 6HC03, part No. 040821191,220-240 VAC,50Hz.	40	0	40	NO				Delcon/ Equivalent or Higher	
52	EMCIAILH 2000008945	Indicator LED (YELLOW), 3SB5285-6HD03, part No.040817191,220-240 VAC, 50Hz.	40	0	40	NO				Delcon/ Equivalent or Higher	
53	EMCIAILH 2000008946	Indicator LED (BLUE), 3SB5285-6HF03, part No. 040826191, 220-240 VAC, 50Hz.	40	0	40	NO				Delcon/ Equivalent or Higher	
54	EMCIAILH 2000008947	Indicator LED, 3SB5285- 6HC01, part No. 040835191, 24VDC/AC	40	0	40	NO				Delcon/ Equivalent or Higher	



_	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
55	EMCICOSP 2000008950	Moving & fixed contact set, model:3TY7500-	15	0	15	SET				Siemens/ Equivalent or Higher	
56	EMCICOSP 2000009086	Contact kit for ML4	5	0	5	SET				Siemens/ Equivalent or Higher	
57	EMCICOCO 2000009303	Auxiliary Contactor,22E, MNo dc,2NO + 2 NC,48VDC,	5	0	5	NO				L&T/ Equivalent or Higher	
58	EMCIAILH 2000009533	LED indication lamp,220- 230V, AC/DC Blue	35	0	35	NO				Delcon/ Equivalent or Higher	
59	EMCICOCO 2000009865	Single Phase contactor,35A,250v AC	6	0	6	NO				Minilec/ Equivalent or Higher	
60	EMCICOCO 2000011388	Power Contactor, 3TF47, coil voltage, 110 V	2	0	2	NO				Siemens/ Equivalent or Higher	
61	EMCISWCO 2000012077	Selector Switch, 4 Way, 16A, 230VAC	5	0	5	NO				Recom/ Equivalent or Higher	
62	EMCICOSP 2000012079	Aux. Switch, 6NO+6NC, making capacity 10A DC, breaking capacity 2A DC	4	0	4	NO				Siemens/ Equivalent or Higher	
63	EMCICOSP 2000012080	Aux. Switch, 12NO+12NC, making capacity 10A DC, breaking capacity 2A DC	4	0	4	NO				Siemens/ Schneider/ Kaycee/ Salzer	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
64	EMCIMEME 2000014190	Energy Meter-SECURE PREMIER 300 TVM, TYPE E3M024 3P 4W 0.2 Class 13.8KV/V3/110/V3,400/1A 50Hz,IB:1A 1600PULSE/UNIT	3	0	3	NO				Secure Premier/ Equivalent or Higher	
65	EMCIMEME 2000014275	Integrated Circuit Cards, MFI960, 80NB, MFI960, 90- 295 VAC	1	0	1	NO				NIVOMAG MFI960/ Wquivalent or Higher	
66	EMCIMEME 2000014621	Analog Ammetero-10- 30A,CTR:10/1A 96x96mm, CL- 1.0, SCALE 240' For MIV Service Seal/ MIV Maintenance Seal.	2	0	2	NO				AE/ Equivalent or Higher	
67	EMCIPBPB 2000014650	Push Button Assembly, 6A,250VAC, Illuminated Push Button Assembly with square actuator, 6A,250VAC, Red	20	0	20	NO				BCH/ Equivalent or Higher	
68	EMCIPBPB 2000014651	Push Button Assembly, 6A,250VAC, Illuminated Push Button Assembly with square actuator, 6A,250VAC, Green	20	0	20	NO				BCH/ Equivalent or Higher	
69	EMCITATA 2000014658	DC Voltage Tranducer I/P15-0- 15 Dual O/P, 4-20mA	4	0	4	NO				AE/ Equivalent or Higher	



	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
70	EMCIMEME 2000015266	Analog Ammeter 0-30- 210A,96x96mm, Cl-1.0, Scale 240', CT Secondary-1A	2	0	2	NO				AE/ Equivalent or Higher	
71	EMCISWCO 2000015283	Switch Mode Power Supply Unit AC/DC, IP range: 110- 265vac, 85-265v dc, output: 24vdc, 20amp.	4	0	4	NO				Phoenix Contact/ Equivalent or Higher	
72	EMCIMEME 2000015349	DC analog Ammeter, 0-750A DC, 0-750A DC, 96sq.mm, 90° FSD, Acc-1.0%, type: SIF96	4	0	4	NO				AE/ Equivalent or Higher	
73	EMCIMEME 2000015623	Inclinometer INX360D-F99- 12E2-V15	3	0	3	NO				PEPPERL/ +FUCHS/ Equivalent or Higher	
74	EMCIMEME 2000015624	Heating Elements,4000w,415V,Sl.No OH2525	3	0	3	NO				Endress+Huaser / Equivalent or Higher	
75	EMCIMEME 2000015940	VFD, 2.2kW/3HP, I/P:3Phase, 380-480V, 47-63Hz, O/P: 3Phase 0-500Hz, AC Voltage: 0-460, Cat No. 25A- D6PON104 for 90T crane LT	1	0	1	NO				Bently Navada/ Equivalent or Higher	
76	EMCICOCO 2000016078	Contactor, LC1D150 with block, Contactor, LC1D150 with block for GOP	1	0	1	NO				Schneider/ Equivalent or Higher	
77	EMCICOCO 2000016738	Contactor, BC9-40-00	4	0	4	NO				L&T/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
78	EMCICOCO 2000016747	MPCB, In=32A, 415V AC, 3 Phase, 50Hz,	2	0	2	NO				Schneider/ Equivalent or Higher	
79	EMCITMTM 2000017914	Radar Level Transmitter, Micropilot FMR51, Model no: FMR51- AAACADBDA5AHJ+AAEM (FMR51-1CD0/0).	1	0	1	NO				Thermen/ Equivalent or Higher	
80	EMCICOCO 2000018548	Rotating Handle for MCCB, 3VA9157-0GK00	3	0	3	NO				Siemens/ Equivalent or Higher	
81	EMCICOCO 2000018550	Housing DOL Starter with SPP Birelay, 7.5kW 12.5-20A 415V SS,3TW72911AW78	1	0	1	NO				Siemens/ Equivalent or Higher	
82	EMCICOCO 2000018555	Contactors, L&T, MNX 45, 415 V, 3 Poles	30	0	30	NO				L&T/ Equivalent or Higher	
83	EMCIPBPB 2000018606	Push Button Assembly,2- 6Am, 220Vdc, Red, Consisting of Actuator, Light Source Unit Sq. Translucent Lens	8	0	8	NO				BCH/ Equivalent or Higher	
84	EMCIPBPB 2000018607	Push Button Assembly,2- 6Am, 220Vdc, Green, Consisting of Actuator, Light Source Unit Sq. Translucent Lens	8	0	8	NO				BCH/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
85	EMCIMEME 2000018613	Analog Indicator Input4- 20Ma DC, Scale: 0-100% Acc: 1.5%, 96X96	8	0	8	NO				MECO/ Equivalent or Higher	
86	EMCIHEHE 2000018614	Thermostat, Range:5-55 Deg C, Th.48V, For controlling Cubical Space Heater Temp. SK3110	4	0	4	NO				RITTAL/ Equivalent or Higher	
87	EMCIMEME 2000018615	Promag 53 Flow Meter, Code: 50098300, Input/Output Board Flexible Assignment	4	0	4	NO				ENDRESS+ HAUSER/ Equivalent or Higher	
88	EMCIRTRT 2000018642	Duplex Pt-100 (Duplex RTD)	25	0	25	NO				To be specified	
89	EMCICOCO 2000018660	Power Contactor, 400A,3pole,240VAC coil, 2NO+2NC Aux (Yule)	2	0	2	NO				Siemens/ Equivalent or Higher	
90	EMCICOCO 2000018661	Aux. Contactor,4NO Part MCRA-40E 220-24V, 50Hz	6	0	6	NO				Siemens/ Equivalent or Higher	
91	EMCIMEME 2000018662	Analog Voltmeter 0-500 AC, SIF72	10	0	10	NO				AE, Meco/ Equivalent or Higher	
92	EMCICOSP 2000018667	Aux. Contact Block, MARN- 404AT, 4NC	6	0	6	NO				Siemens/ Equivalent or Higher	



_	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
93	EMCIRTRT 2000018670	RTD Sensor, Duplex, 6 Wire, PT-100 Type Probe size - 6mm dia x 75 mm, Cable length - 6 wire x 10 meters (Details at Annexure-)	20	0	20	NO				TECHNO/ Equivalent or Higher	
94	EMCICOCO 2000018686	Contractor , Type 3TF 48 20,75A,415v AC	10	0	10	NO				To be specified	
95	EMCICOCO 2000018718	Contactor 3TF46, 230V/AC Coil Supply, 3 Add on contact	2	0	2	NO				Siemens/ Equivalent or Higher	
96	EMCICOCO 2000018719	Auxillary Contactor 3T X 4001,2A,1NC	2	0	2	NO				Siemens/ Equivalent or Higher	
97	EMCICOCO 2000018721	Contactor, Ith:125A-IeAC 1:100A, UI:1000Vac, B50	2	0	2	NO				ABB/ Equivalent or Higher	
98	EMCICOCO 2000018722	Auxilliary Contactor, Ith:10A UI:690Vac, IEC 947-5-1, EN 60947-5-1,CA7	2	0	2	NO				ABB/ Equivalent or Higher	
99	EMCIAILH 2000018729	Indication Lamp LED,24V, Red, 3SD 1401-2H22	3	0	3	NO				Siemens/ Equivalent or Higher	
100	EMCIAILH 2000018730	Indication Lamp LED,24V, Orange, 3SD 1401-2H22	3	0	3	NO				Siemens/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/MakeAlstom/ Equivalent or HigherSiemens/ Equivalent or HigherSiemens/ Equivalent or HigherSiemens/ Equivalent or HigherSiemens/ Equivalent or HigherNIVOMAG MFI960/ Wquivalent or HigherNIVOMAG MFI960/ Wquivalent or HigherNIVOMAG MFI960/ Wquivalent or Higher	Of Origin
101	EMCIAILH 2000018731	Negative Sequence Voltage Relay, Type:VTNM	2	0	2	NO					
102	EMCICOCO 2000018765	Air Break Contactor 3TF 31(01-OA)	5	0	5	NO				Equivalent or	
103	EMCICOCO 2000018769	P-Contactor 3-ph 415 VAC,53A,110 VAC, 50kW, 2NO,2NC	5	0	5	NO				Equivalent or	
104	EMCICOCO 2000018770	Power Contactor 3-ph, 415 VAC,53A, 110VAC, 2No,2NC, 30kW	5	0	5	NO				Equivalent or	
105	EMCISNSN 2000018771	Shunt,1500A/16mV, Accuracy 0.5%, Material: Manganin Cu Busbar Tin Plated	1	0	1	NO				To be specified	
106	EMCIMEME 2000018773	Integrated Circuit Cards, MF1960, 250NB, NIVOMAG MF1960, 90-295 VAC	1	0	1	NO				Wquivalent or	
107	EMCIMEME 2000018774	Integrated Circuit Cards, MF1960, 350NB, NIVOMAG MF1960, 90-295 VAC	1	0	1	NO				Wquivalent or	
108	EMCIAILH 2000018780	LED Indication lamp, 220VDC, Round, Size: 16mm, Colour: Red	10	0	10	NO				Siemens/ Equivalent or Higher	



	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
109	EMCIAILH 2000018781	LED Indication lamp, 220VDC, Round, Size: 16mm, Colour: Green	8	0	8	NO				Siemens/ Equivalent or Higher	
110	EMCIPBPB 2000018783	Pushbutton with LED lamp, 220 V AC/DC, with 1 NO & 1 NC contact block, Size; 22mm, Color: Green	50	0	50	NO				Siemens/ Equivalent or Higher	
111	EMCIPBPB 2000018784	Pushbutton with LED lamp, 220 V AC/DC, with 1 NO & 1 NC contact block, Size; 22mm, Color: Red	50	0	50	NO				Siemens/ Equivalent or Higher	
112	EMCIAIAW 2000018846	Alarm Anuuciator, 64 channel, T-AA-GSE-64, power supply: 90-260VAC OR VDC, cutout size: 520 x 370, overall dimension: 570 X 420 X 60	1	0	1	NO				SERTEL ELECTRONICS/ Equivalent or Higher	
113	EMCIAILH 2000018847	LED Indicating lamp LSU, Green, Aux. power supply - 240V AC, surge protected HFB2SGH	45	0	45	NO				BCH/ Equivalent or Higher	
114	EMCIAILH 2000018848	LED Indicating lamp LSU, Amber, Aux. power supply - 240V AC, surge protected HFB2SAH	39	0	39	NO				BCH/ Equivalent or Higher	



	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
115	EMCIARAR 2000015951	Adapter, input: 230V, o/p: 5V, 1.2A	2.000			NO				Dlink/ Equivalent or Higher	
116	EMCIARAR 2000017846	Aux. Contact Block,2A 1NO, Aux. Contact block for 3TF3 & 3TH3, 3TX4010-2A 1NO	5	0		NO				Siemens/ Equivalent or Higher	
117	EMCIARAR 2000017847	Aux Contact Block,2A 1NC, Aux Contact block for 3TF3 & 3TH3, 3TX4010-2A 1NC	5	0		NO				Siemens/ Equivalent or Higher	
118	EMCIARAR 2000017850	Frequency Inverter Drive, Input: 380, Frequency inverter Drive, DIC-4-014-E- 0000-03 input:380 V-15%/ 480V+10% 50-60Hz/3ph 14.2A. Output: 0-Uniput, 0-300 Hz, 3ph. 5.5kW, 50Hz.	1	0		NO				Demag/ Equivalent or Higher	
119	EMCIMEME 2000008406	ABT Energy meter: ER300P, 3P, 4w, Ib:1A,	0	2	2	NO				L&T/ Equivalent or Higher	
120	EMCIDIDI 2000013288	Diode Set, 6diodes with surge suppressor	0	1	1	NO				To be specified	
121	EMCICOCO 2000017467	DC Coil operated Contactor, 200A	0	1	1	NO				To be specified	
122	EMCICOCO 2000013253	Power Contactor 85A, Coil Voltage:240 VAC	0	3	3	NO				Siemens/ Equivalent or Higher	



	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
123	EMCICOCO 2000013254	Power Contactor 63A, Coil Voltage:240 VAC	0	3	3	NO				Siemens/ Equivalent or Higher	
124	EMCICOCO 2000013255	Power Contactor 38A, CoilVoltage:240 VAC	0	3	3	NO				Siemens/ Equivalent or Higher	
125	EMCICOCO 2000013256	Power Contactor 32A, Coil Voltage: 40VAC	0	3	3	NO				Siemens/ Equivalent or Higher	
126	EMCICOCO 2000013257	Power Contactor 9A, Coil Voltage:240 VAC	0	2	2	NO				Siemens/ Equivalent or Higher	
127	EMCICOCO 2000017468	AC Power Contactor, Type: LC1D323M	0	2	2	NO				C&S/Equivalent or Higher	
128	EMCICOCO 2000017469	AC Power Contactor, Type: LC1D803M	0	2	2	NO				C&S/Equivalent or Higher	
129	EMCICOCO 2000017470	AC Power Contactor, Type: LC1F115M	0	2	2	NO				C&S/Equivalent or Higher	
130	EMCICOCO 2000017471	DC Contactor,115A	0	1	1	NO				To be specified	
131	EMCICOCO 2000009023	Aux. contactor,2NO+2NC, coil: 230V AC	0	5	5	NO				Siemens/ Equivalent or Higher	
132	EMCICOSP 2000017472	Aux. Contactor, 110V DC	0	2	2	NO				To be specified	



	Material		Qty	Qty	Total	_	UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
133	EMCICOCO 2000009025	Aux. contactor, 2NO+2NC, coil: 24V DC	0	2	2	NO				Siemens/ Equivalent or Higher	
134	EMCICOSP 2000017473	Aux. Contactor, 415 AC	0	2	2	NO				To be specified	
135	EMCIAIAW 2000009143	Alarm Annunciator, Type: MBAS-0600, 1D, 8 Window with out T/A/R push button, 1 NO Hooter Contact, Aux. supply: 24V DC.	0	1	1	NO				MINILEC/ Equivalent or Higher	
136	EMCIAILH 2000013538	LED Type (Red), Type: 3PLBR4L, 240V AC	0	15	15	NO				To be specified	
137	EMCIAILH 2000013539	LED Type (Green), Type: 3PLBR3L, 240V AC	0	15	15	NO				To be specified	
138	EMCIAILH 2000013540	LED Type (Amber), Type: 3PLBR5L, 240V AC	0	15	15	NO				To be specified	
139	EMCIAILH 2000013268	Indication Lamp, 230 VAC Orange,	0	2	2	NO				TEKNIC/ Equivalent or Higher	
140	EMCIAILH 2000013269	Indication Lamp, 230V AC Green,	0	2	2	NO				TEKNIC/ Equivalent or Higher	
141	EMCIAILH 2000013270	LED Indication Lamp, 22.5mm, 24VDC, Red	0	2	2	NO				TEKNIC/ Equivalent or Higher	
142	EMCIAILH 2000013271	LED Indication Lamp, 22.5mm, 24VDC,Green	0	2	2	NO				TEKNIC/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	T RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
143	EMCIAILH 2000013272	LED Indication Lamp, 22.5mm, 24VDC, Blue	0	2	2	NO				TEKNIC/ Equivalent or Higher	
144	EMCIAILH 2000013273	LED Indication Lamp, 22.5mm, 12VDC, Blue	0	2	2	NO				TEKNIC/ Equivalent or Higher	
145	EMCIAILH 2000013274	LED Indication Lamp, 22.5mm, 240VAC, Red	0	2	2	NO				TEKNIC/ Equivalent or Higher	
146	EMCIAILH 2000013275	LED Indication Lamp,22.5mm,240VAC, Yellow	0	2	2	NO				TEKNIC/ Equivalent or Higher	
147	EMCIAILH 2000013276	LED Indication Lamp,22.5mm, 240VAC, Blue	0	2	2	NO				TEKNIC/ Equivalent or Higher	
148	EMCISWCO 2000013277	Selector Switch, 2P, 3 Way with OFF, 6A	0	1	1	NO				KAYCEE/ Equivalent or Higher	
149	EMCISWCO 2000013278	Selector Switch, 2P, 6A	0	1	1	NO				KAYCEE/ Equivalent or Higher	
150	EMCISWCO 2000013279	Selector Switch (L/R/SP), 3S26C, 10A,	0	5	5	NO				Control & Switchgear/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
151	EMCIPBPB 2000013280	Push Button, Stayput Type, 22.5mm, Red	0	1	1	NO				Control & Switchgear/ Equivalent or Higher	
152	EMCIPBPB 2000013281	Push Button, Actuator Type,22.5mm, Green	0	1	1	NO				Control & Switchgear/ Equivalent or Higher	
153	EMCIPBPB 2000013282	Push Button, Actuator Type, 22.5mm, Red,	0	1	1	NO				Control & Switchgear/ Equivalent or Higher	
154	EMCIPBPB 2000013283	Push Button, Actuator Type,22.5mm, Yellow	0	1	1	NO				Control & Switchgear/ Equivalent or Higher	
155	EMCIPBPB 2000013284	Push Button, Actuator Type,22.5mm, Blue	0	1	1	NO				Control & Switchgear/ Equivalent or Higher	
156	EMCIPBPB 2000013285	Push Button, Actuator Type,22.5mm, Black	0	1	1	NO				Control & Switchgear/ Equivalent or Higher	



	Material		Qty	Qty	Total		UN	UNIT RATE			Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Total Amount	Brand/Make	Of Origin
157	EMCIPBPB 2000013286	Push Button Element, 1 NC	0	1	1	NO				Control & Switchgear/ Equivalent or Higher	
158	EMCIPBPB 2000013287	Push Button Element, 1 NO	0	1	1	NO				Control & Switchgear/ Equivalent or Higher	
159	EMCIPBPB 2000013289	Push button 500V, 10A with 1NO+1NC, Red	0	5	5	NO				To be specified	
160	EMCIPBPB 2000013290	Push button, 500V,10A with 1NO+1NC, Green	0	5	5	NO				To be specified	
161	EMCICOCO 2000013291	Contactor, 3RT1054-1B,	0	1	1	NO				To be specified	
162	EMCICOCO 2000013304	Contactor, RTA 421,	0	1	1	NO				To be specified	
163	EMCITATA 2000008141	Current converter unit, model: 2201	0	1	1	NO				To be specified	
164	EMCICOCO 2000013307	Contactor, 85A, 600VAC	0	6	6	NO				To be specified	
165	EMCICOCO 2000009029	Aux. contactor, 2NO+2NC, coil: 415V AC	0	4	4	NO				MXO/ Equivalent or Higher	
166	EMCITMTM 2000009092	Pressure transmitter, 0-40 bar, 4-20mA	0	5	5	NO				To be specified	
167	EMCISWCO 2000013312	Magnetic Switch	0	1	1	NO				To be specified	



	Material		Qty	Qty	Total		UN	IT RATE	Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
168	EMCICOCO 2000013314	Contactor, 22E MX O, 415VAC	0	5	5	NO				To be specified	
169	EMCICOCO 2000013315	Contactor, 22E MX Odc, 24VDC	0	10	10	NO				To be specified	
170	EMCICOSP 2000013316	Auxiliary Contactcts, MX-A1 22E	0	7	7	NO				To be specified	
171	EMCISWCO 2000013318	Time Switch, TS-203B	0	3	3	NO				To be specified	
172	EMCIAIAW 2000013321	Annunciator 8 windows, MBAS 0600	0	1	1	NO				To be specified	
173	EMCISWLI 2000002942	Limit switch, 10A, 500V AC, Type: LSP0 (Photo Attached)	0	3	3	NO				BOHMEN/ Equivalent or Higher	
174	EMCITMTM 2000013334	Level Transmitter, 0-5m H20,	0	2	2	NO				To be specified	
175	EMCIAIBH 2000013335	Buzzer cum Flasher, BZ, 230VAC	0	1	1	NO				To be specified	
176	EMCIMEME 2000013337	PPM Meter, M181651, E N P:230VAC,	0	1	1	NO				To be specified	
177	EMCIMEME 2000013338	Flow Meter Sensor, RS 485, 4-20mA, Type: B/O	0	1	1	NO				CEE DEE/ equivalent or Higher	
178	EMCICOSP 2000013340	Contactor Te 110V 9A, 2MN02MNC, 1NO+1NC	0	2	2	NO				Schneider/ Equivalent or Higher	



_	Material		Qty	Qty	Total		UN	UNIT RATE			Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Total Amount	Brand/Make	Of Origin
179	EMCICOSP 2000013341	Contactor Control SKR80.36M, 106694	0	1	1	NO				Schneider/ Equivalent or Higher	
180	EMCICOSP 2000013342	Contactor Te 110V 18A, 3MNO1NO, 1NC,	0	2	2	NO				Schneider/ Equivalent or Higher	
181	EMCICOCO 2000013345	Contactor Te 110V 9A 3MNO1NO, 1NC,	0	1	1	NO				Schneider/ Equivalent or Higher	
182	EMCIAILH 2000013356	Pilot Light, 0707030019	0	1	1	NO				To be specified	
183	EMCIAILH 2000013360	Emergency/Revolving Lamp	0	1	1	NO				To be specified	
184	EMCICOCO 2000013362	Contactor Te 110V 25A, 4MNO1NO 1NC,	0	1	1	NO				Schneider/ Equivalent or Higher	
185	EMCICOCO 2000013363	Contactor Te 110V 25A, 2MNO2MNC 1NO1NC,	0	1	1	NO				Schneider/ Equivalent or Higher	
186	EMCICOCO 2000013364	Contactor Te 110V 9A 3MNO1NO 1NC,	0	1	1	NO				Schneider/ Equivalent or Higher	
187	EMCITATA 2000017478	Isolation Amplifier	0	4	4	NO				To be specified	
188	EMCITATA 2000017482	Transducer, I/P: o-200V DC, O/P: 4-20 mA	0	6	6	NO				To be specified	



_	Material		Qty	Qty	Total		UNIT RATE		Total		Country
SN	Code	Description	(DGPC)	(DHPC)	(Qty.)	UOM	In Figure	In Words	Amount	Brand/Make	Of Origin
189	EMCITATA 2000017483	Transducer, I/P: 0-75mV DC, O/P: 4-20 mA	0	6	6	NO				To be specified	
190	EMCICOSP 2000013376	Mechanical Locking Te, LAD- 9V2	0	1	1	NO				Schneider/ Equivalent or Higher	
191	EMCICOCO 2000013345	Contactor Te 110V 9A 3MNO1NO, 1NC,	0	1	1	NO				Schneider/ Equivalent or Higher	
192	EMGOEHSP 2000013346	Rectifier GTSWK30-B and current detector	0	1	1	NO				ABUS Electronic/ Equivalent or Higher	
								Total amount:			

NOTE:

The requirement of DHPC shall be segregated from DGPC and the order will be place by DHPC directly to the suppliers. However, MMD shall place the order for DGPC. Terms and conditions shall be same except for the submission of performance security/retention money as indicated in the tender document.



TECHNICAL SPECIFICATION

Sl. No.	Particulars	Specifications	Remarks
1	Туре	PT-100, Duplex	
2	Temperature range	0 – 200 degrees Celsius	
3	Probe size	6mm Ø x 75mm length	
4	Probe material	Platinum / Nickel / Copper	
5	Cable	6 wire x 10 meters	
6	Connection	M20 x 2(M), Adj.	
7	Sensor Configuration	Duplex, 6 wire	
8	Preferred brand	TECHNO or equivalent	

SAMPLE PICTURE Figure 8.1. Sample picture of RTD sensor, Duplex, 6 wire, PT-100 type





Sl. No. 173 (Price Schedule)



