

# REPUBLIC OF THE PHILIPPINES NATIONAL POWER CORPORATION

(Pambansang Korporasyon sa Elektrisidad)

## **BID DOCUMENTS**

Name of Project: SUPPLY AND DELIVERY OF ELECTRICAL

SECURITY SPARE PARTS FOR 20MVA MOGPOG

**SUBSTATION** 

PR No. : S1-M6923-008

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#### ATTACHMENT 1

#### PR NO S1-M6923-008

# SUPPLY AND DELIVERY OF ELECTRICAL SECURITY SPARE PARTS FOR 20MVA MOGPOG SUBSTATION

ITEM	DESCRIPTION	PART NO.	QTY		UNIT PRICE	TOTAL PRICE
1	Breaker, VCB, VD4 EL-EP 17.5KV, 1250A-25KA	-	1	Piece	1,300,000.00	1,300,000.00
2	Automatic Voltage Regulator (AVR), ET-SZ6 AVR	-	2	Piece	70,000.00	140,000.00
3	Breaker, IC65N -125V 6KA	-	2	Piece	5,000.00	10,000.00
4	Breaker VCB, VD4 EL-EP 17.5kV, 630A-25kA	-	1	Piece	800,000.00	800,000.00
5	Circuit Breaker, IC65N		2	Piece	5,000.00	10,000.00
6	Circuit Breaker, Miniature, NDB2-63 C1	-	2	Piece	5,000.00	10,000.00
7	Circuit Breaker, Miniature, NDB2-63 C16	-	2	Piece	5,000.00	10,000.00
8	Circuit Breaker, Miniature, NDB2-63 IN=3	-	. 2	Piece	5,000.00	10,000.00
9	Meter, Active Energy Type BIV3, POWERLOGIC PM5100	_	2	Piece	50,000.00	100,000.00
10	Relay, Distance Protection NR PCS-902 Line Distance Relay	-	1	Unit	670,000.00	670,000.00
11	Relay, NR CJX Interposing Relay	-	2	Piece	150,000.00	300,000.00
12	Relay, NR PCS-9611 Feeder Relay	-	3	Unit	180,000.00	540,000.00
13	Relay, Auxiliary, NR PCS-974 Transformer Aux. Relay		1	Piece	290,000.00	290,000.00
						4,190,000.00

## **SECTION I**

# **INVITATION TO BID**



## National Power Corporation INVITATION TO BID PUBLIC BIDDING – BCS 2023-0357

The NATIONAL POWER CORPORATION (NPC), through its approved Corporate Budget
of CY 2023 intends to apply the sum of (<u>Please see schedule below</u>) being the Approved Budget
for the Contract (ABC) to payments under the contract. Bids received in excess of the ABC shall be
automatically rejected at Bid opening.

PR Nos./PB Ref No. & Description	Similar Contracts	Pre-bid Conference	Bid Submission / Opening	ABC/ Amt. of Bid Docs
MA-A2M23-002 / PB230822-JD00228 Rehabilitation of Gantry Crane for Agus 2 HEPP	Supply, Delivery, Installation, Test and Commissioning of Gantry Crane / Hoisting Equipment of at least 50 Tons Capacity	10 August 2023 9:30 A.M.	22 August 2023 9:30 A.M.	₱ 19,000,000.00 / ₱ 25,000.00
S1-M6923-008 / PB230725-RD00195 (PB2) Supply and Delivery of Electrical Security Spare Parts for 20MVA Mogpog Substation	Supply and Delivery of Electrical Spare Parts / Components / Equipment and/or Line Hardware for Substation / Transmission / Distribution Line	10 August 2023 9:30 A.M.	22 August 2023 9:30 A.M.	₱ 4,190,000.0 0 / ₱ 5,000.00

2. The NPC now invites bids for Items listed above. Delivery of the Goods is required (see table below) specified in the Technical Specifications. Bidders should have completed, within (see table below) from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. (Instruction to Bidders).

PR No/s. / PB Ref No/s.  MA-A2M23-002	Delivery Period / Contract Duration Ninety (90) Calendar Days	Relevant Period of SLCC reckoned from the date of submission & receipt of bids	
S1-M6923-008	One Hundred Fifty (150)  Calendar Days	Fifteen (15) Years Ten (10) Years	

 Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA 5183.

 Prospective Bidders may obtain further information from National Power Corporation, Bids and Contracts Services Division and inspect the Bidding Documents at the address given below during office hours (8:00AM to 5:00PM), Monday to Friday.

- 5. A complete set of Bidding Documents may be acquired by interested Bidders from the given address and website(s) and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB. <u>Bidding fee may be refunded in accordance with the guidelines based on the grounds provided under Section 41 of R.A. 9184 and its Revised IRR.</u>
- 6. The National Power Corporation will hold Pre-Bid Conference (see table above) and/or through video conferencing or webcasting which shall be open to prospective bidders.

Only registered bidder/s shall be allowed to participate for the conduct of virtual pre-bid conference. **Unregistered bidders** may attend the Pre-Bid Conference at the Kañao Room, NPC subject to the following:

- a. Only a maximum of two (2) representatives from each bidder / company shall be allowed to participate during the virtual pre-bid conference.
- b. A "No Face mask / No Entry" policy shall be implemented in the NPC premises. Face mask shall be 3-ply surgical or KN95 mask type.
- c. The requirements herein stated including the medium of submission shall be subject to GPPB Resolution No. 09-2020 dated 07 May 2020
- d. The Guidelines on the Implementation of Early Procurement Activities (EPA) shall be subject to GPPB Circular No. 06-2019 dated 17 July 2019
- 7. Bids must be duly received by the BAC Secretariat through (i) manual submission at the office address indicated below; (ii) online or electronic submission before the specified time stated in the table above for opening of bids. Late bids shall not be accepted.
- 8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 14.
- Bid opening shall be on Kañao Function Room, NPC Head Office, Diliman, Quezon City and/or via online platform to be announced by NPC. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
- 10. The National Power Corporation reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of R.A. No. 9184, without thereby incurring any liability to the affected bidder or bidders.
- 11. For further information, please refer to:

Bids and Contracts Services Division, Logistics Department

BIR Road cor. Quezon Avenue

Diliman, Quezon City

Tel Nos.: 8924-5211 and 8921-3541 local 5564/5211

Fax No.: 8922-1622

Email: bcsd@napocor.gov.ph /

12. You may visit the following websites:

For downloading of Bidding Documents: https://www.napocor.gov.ph/bcad/bids.php

ATTY. MELCHOR P. RIDULME
Vice President, Office of Legal Counsel and

Chairman, Bids and Awards Committee

# **SECTION II**

# INSTRUCTIONS TO BIDDERS

### **SECTION II – INSTRUCTIONS TO BIDDERS**

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#### SECTION II - INSTRUCTIONS TO BIDDERS

#### Scope of Bid

The National Power Corporation (NPC or NAPOCOR) wishes to receive Bids for the SUPPLY AND DELIVERY OF ELECTRICAL SECURITY SPARE PARTS FOR 20MVA MOGPOG SUBSTATION, with identification number PR NO. S1-M6923-008.

The Procurement Project (referred to herein as "Project") is composed of one (1) lot and will be awarded per lot to winning Bidder/s in one complete contract, the details of which are described in Section VI (Technical Specifications).

#### 2. Funding Information

- The GOP through the source of funding as indicated below for CY 2023 in the amount of P4,190,000.00.
- 2.2. The source of funding is the Corporate Operating Budget of the National Power Corporation.

#### 3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

#### 4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

#### 5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

5.2. Foreign ownership exceeding those allowed under the rules may participate when citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines.

The foreign bidder claiming eligibility by reason of their country's extension of reciprocal rights to Filipinos shall submit a certification from the relevant government office of their country stating that Filipinos are allowed to participate in their government procurement activities for the same item/product. The said certification shall be validated during the post-qualification of bidders.

- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to at least fifty percent (50%) of the ABC.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

#### 6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under ITB Clause 18.

#### 7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The portions of Project and the maximum percentage allowed to be subcontracted are indicated in the BDS, which shall not exceed twenty percent (20%) of the contracted Goods.

- 7.2. The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in ITB Clause 5 to the implementing or end-user unit.
- 7.3. Subcontracting of any portion of the Project does not relieve the Supplier of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Supplier's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

#### 8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing/webcasting as indicated in paragraph 6 of the IB.

#### 9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the IB, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

#### 10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in Section VIII (NPCSF-GOODS-01 - Checklist of Technical and Financial Documents).
- 10.2. The Bidder's SLCC as indicated in ITB Clause5.3 should have been completed within ten (10) years prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- 10.4. The Statement of the bidder's Single Largest Completed Contract (SLCC)(NPCSF-GOODS-03) and List of all Ongoing Government & Private Contracts Including Contracts Awarded but not yet Started(NPCSF-GOODS-02) shall comply with the documentary requirements specified in the <u>BDS.</u>

#### 11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in Section VIII (NPCSF-GOODS-01 - Checklist of Technical and Financial Documents).
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the IB shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

#### 12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
  - a. For Goods offered from within the Procuring Entity's country:
    - The price of the Goods quoted EXW (ex-works, ex-factory, exwarehouse, ex-showroom, or off-the-shelf, as applicable);
    - The cost of all customs duties and sales and other taxes already paid or payable;
    - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
    - iv. The price of other (incidental) services, if any, listed in the BDS.
  - b. For Goods offered from abroad:
    - i. Unless otherwise stated in the BDS, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the BDS. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
    - ii. The price of other (incidental) services, if any, as listed in the BDS.

#### 13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in Philippine Pesos.

#### 14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the BDS, which shall be not less than the percentage of the ABC in accordance with the schedule in the BDS.
- 14.2. The Bid and bid security shall be valid for One Hundred Twenty (120) calendar days from the date of opening of bids. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as nonresponsive.

#### 15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

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The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

#### 16. Deadline for Submission of Bids

16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the IB.

#### 17. Opening and Preliminary Examination of Bids

17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the IB. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

#### 18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

#### 19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by ITB Clause 14 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in Section VI (Technical Specifications), although the ABCs of these lots or items are indicated in the BDS for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.

- 19.4. The Project shall be awarded per lot to winning Bidder/s in one complete or separate contract/s.
- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

#### 20. Post-Qualification

20.1. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the BDS.

#### 21. Signing of the Contract

21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the BDS.

## **SECTION III**

# **BID DATA SHEET**

# **SECTION III - BID DATA SHEET**

ITB		
Clause		
5.3	For this purpose, contracts similar to the Project shall be Supply and Delivery of Electrical Spare Parts/Components/Equipment and/or Line Hardware for Substation/Transmission Line/Distribution Line.	
	The Single Largest Completed Contract (SLCC) as declared by the bidder shall be verified and validated to ascertain such completed contract. Hence, bidders must ensure access to sites of such projects/equipment to NPC representatives for verification and validation purposes during post-qualification process.	
	It shall be a ground for disqualification, if verification and validation cannot be conducted for reasons attributable to the Bidder.	
7.1	Subcontracting may be allowed on transport, local/non-skilled labor under the supervision of the Bidder. The Bidder shall not be relieved from any liability or obligation that may arise from the performance of the Subcontractor.	
10.4	The list of on-going contracts (Form No. NPCSF-GOODS-02) shall be supported by the following documents for each on-going contract to be submitted during <b>Post-Qualification</b> :	
	Contract/Purchase Order and/or Notice of Award	
	Certification coming from the project owner/client that the performance is satisfactory as of the bidding date	
	The bidder shall declare in this form all his on-going government and private contracts including contracts where the bidder (either as individual or as a Joint Venture) is a partner in a Joint Venture agreement other than his current joint venture where he is a partner. Non declaration will be a ground for disqualification of bid.	
	The Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid (Form No. NPCSF-GOODS-03) shall be supported by the following documents to be submitted during <b>Bid Opening:</b>	
	Contract/Purchase Order	
	Certificate of Acceptance; or Certificate of Completion; or Official Receipt(O.R); or Sales Invoice	
	The prospective bidders shall declare its Joint Venture partner during the purchase of bid/tender documents. Any single bidder/s who already procured/secured the bidding documents but want to avail the Joint Venture Agreement (JVA) shall inform the BAC in writing prior to the bid opening for records and documentation purposes. Failure to do so shall be a ground for disqualification/non-acceptance of its bid.	

10.5	Bidders shall also submit the following requirements in their first envelope, Eligibility and Technical Component of their bid:		
	Data and Information to be submitted with the Proposal as specified in Clause TS-5.0 of Section VI - Technical Specifications;		
	Complete eligibility documents of the proposed sub-contractor, if any		
12	The price of the Goods shall be quoted DDP Project Site or the applicable International Commercial Terms (INCOTERMS) for this Project.		
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:		
	<ul> <li>a) The amount of not less two percent (2%) of ABC, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</li> </ul>		
	b) The amount of not less than five percent (5%) of ABC, if bid security is in Surety Bond.		
19.3	The Goods are grouped together in one (1) lot and will be awarded to one (1) Bidder in one complete contract.		
	Partial bid is not allowed. The Goods are grouped in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.		
ļ	The Bidders bid offer must be within the ABC of the lot and ABC per item.		
9	Bid offers that exceed the ABC of the lot or any of the item, with incomplete price, shall be rejected.		
19.5	If the Bidder opted to submit a Committed Line of Credit (CLC), the bidder must submit a granted credit line valid/effective at the date of bidding.		
20.1	Additional documents to be submitted during Post-Qualification:		
	a. Latest Income Tax Returns filed and paid through the BIR Electronic Filing and Payment System (eFPS);		
	b. Business Tax/VAT Returns within the last six (6) months preceding the date of the bid submission, filed and paid through the BIR (eFPS);		
	c. PhilGEPS Registration (Platinum Membership), if not yet submitted with the bid;		
	d. Valid and current Mayor's/Business Permit, if under renewal during bidding;		
	e. Contract/Purchase Order and/or Notice of Award for the contracts stated in the List of all Ongoing Government & Private Contracts Including Contracts Awarded but not yet Started (NPCSF-GOODS-02);		
	f. Certification coming from the project owner/client that the performance is satisfactory as of the bidding date for all ongoing contracts stated in Form		

	NPCSF-GOODS-02;
	g. Manufacturer's brochures, manuals and other supporting documents of equipment, materials, hardware and tools proposed by the bidders must comply with the technical specifications of such equipment, materials, hardware and tools. It shall be a ground for disqualification if the submitted brochures, manuals and other supporting documents are determined not complying with the specifications during technical evaluation and post- qualification process.
	Equipment, materials, hardware and tools proposed by the winning bidder to be supplied, which were evaluated to be complying with the technical specifications, shall not be replaced and must be the same items to be delivered/installed/used during the contract implementation. Any proposed changes/replacement of said items may be allowed on meritorious reasons subject to validation and prior approval by NPC.
20.2	The licenses and permits relevant to the Project and the corresponding law requiring it as specified in the Technical Specifications, if any.
21.2	Notice to Proceed.

## **SECTION IV**

# GENERAL CONDITIONS OF CONTRACT

### **SECTION IV - GENERAL CONDITIONS OF CONTRACT**

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#### SECTION IV – GENERAL CONDITIONS OF CONTRACT

#### 1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the Special Conditions of Contract (SCC).

#### 2. Advance Payment and Terms of Payment

- 2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the SCC.

#### 3. Performance Security

- 3.1. Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184.
- 3.2. The performance bond to be posted by the Contractor must also comply with additional requirements specified in the SCC.

#### 4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the SCC, Section VI (Technical Specifications) shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

#### 5. Warranty

- 5.1 In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 5.2 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

#### 6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

## **SECTION V**

# SPECIAL CONDITIONS OF CONTRACT

## **SECTION V - SPECIAL CONDITIONS OF CONTRACT**

GCC Clause	
1	Delivery and Documents –
	The delivery terms applicable to the Contract is DDP delivered to the project site specified in the technical specifications, in accordance with INCOTERMS. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.
	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI – Technical Specifications. The details of shipping and/or other documents to be furnished by the Supplier are as follows:
	For Goods supplied from within the Philippines
	Upon delivery of the Goods to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents to the Procuring Entity:
	(i) Original and four copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;
	(ii) Original and four copies of Supplier's factory test/inspection report;
	(iii) Original and four copies of the certificate of origin (for imported Goods);
1	(iv) Delivery receipt detailing number and description of items received signed by the Procuring Entity's representative at the Project Site;
	(v) Certificate of Completion/Inspection Report signed by the Procuring Entity's representative at the Project Site;
	(vi) Original and four copies of the Inspection Receiving Report signed by the Procuring Entity's representative at the Project Site;
	(vii) Original and four copies of the Manufacturer's and/or Supplier's warranty certificate; and
	(viii) Documents specified in the Technical Specifications, if any.
	For Goods supplied from abroad:
	Upon shipment, the Supplier shall notify the Procuring Entity and the insurance company by e-mail the full details of the shipment, including Contract Number, description of the Goods, quantity, vessel, bill of lading number and date, port of loading, date of shipment, port of discharge etc. Upon delivery to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents as applicable with the documentary requirements of any letter of credit issued taking precedence:
	(i) Original and four copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;

- Original and four copies of the negotiable, clean shipped on board bill of lading marked "freight pre-paid" and five copies of the non-negotiable bill of lading:
- (iii) Original and four copies of Supplier's factory test/inspection report;
- Delivery receipt detailing number and description of items received signed (iv) by the Procuring Entity's representative at the Project Site:
- Certificate of Completion/Inspection Report signed by the Procuring (v) Entity's representative at the Project Site;
- (vi) Original and four copies of the Inspection Receiving Report signed by the Procuring Entity's representative at the Project Site;
- (vii) Original and four copies of the certificate of origin (for imported Goods): and
- (viii) Original and four copies of the Manufacturer's and/or Supplier's warranty certificate including all other documents specified in the Technical Specifications, if any.

For purposes of this Clause the Procuring Entity's Representative at the Project Site is Division Manager-Danilo D. Barcarse

#### Incidental Services -

The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:

- a. performance or supervision of on-site assembly and/or start-up of the supplied Goods:
- furnishing of tools required for assembly and/or maintenance of the b. supplied Goods;
- C, furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods:
- performance or supervision or maintenance and/or repair of the supplied d. Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- f. Additional requirements specified in Section VI – Technical Specifications.

The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

#### Spare Parts –

The Supplier is required to provide all of the following materials, notifications. and information pertaining to spare parts manufactured or distributed by the Supplier:

- such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- in the event of termination of production of the spare parts:
  - advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
  - ij. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested

The spare parts and other components required are listed in Section VI (Technical Specifications) and Section VII (Schedule of Requirements/Bid Price Schedule) and the costs thereof are included in the contract price.

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for the period specified in the Technical Specifications.

Spare parts or components shall be supplied as promptly as possible, but in any case, within three (3) months of placing the order.

#### Packaging -

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand. without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity Name of the Supplier Contract Description Final Destination Gross weight

Any special lifting instructions
Any special handling instructions
Any relevant HAZCHEM classifications

A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.

#### Transportation -

Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.

Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.

The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.

#### Intellectual Property Rights -

The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.

Advance payment not to exceed fifteen percent (15%) of the contract amount shall be allowed and paid within sixty (60) calendar days from effectivity of the contract and upon the submission to and acceptance by the Procuring Entity of an irrevocable letter of credit or bank guarantee issued by a Universal or Commercial Bank. The irrevocable letter of credit or bank guarantee must be for an equivalent amount, shall remain valid until the goods are delivered, and accompanied by a claim for advance payment.

2.2

All progress payments shall first be charged against the advance payment until the latter has been fully exhausted.

The terms of payment shall be as follows:

#### 1) For Supply and Delivery Contracts:

- (a) On Contract Effectivity: Advance payment of Fifteen percent (15%) of the total Contract Price shall be paid within sixty (60) days from effectivity of the Contract and upon submission of a claim and an irrevocable letter of credit or bank guarantee issued by a Universal or Commercial Bank for the equivalent amount valid until the Goods are delivered and in the form provided in Section VIII- Bidding Forms.
- (b) On Delivery: Eighty percent (80%) of the Contract Price of the delivered Goods shall be considered for payment, less the total amount of advance payment, if any and other deductions. If the amount is sufficient to fully recoup the advance payment, the remainder after deductions shall be paid to the Supplier within sixty (60) days after the date of receipt of the Goods and upon submission of the documents (i) through (vi) specified in the SCC provision on Delivery and Documents. Otherwise, the total delivery payment shall be charged against the advance payment and the remaining advance payment will be fully recouped from the succeeding claims.
- (c) On Acceptance: The remaining twenty percent (20%) of the Contract Price of the *delivered Goods* shall be paid to the Supplier within sixty (60) days after the date of submission of the acceptance and inspection certificate for the respective delivery issued by the Procuring Entity's authorized representative. In the event that no acceptance certificate is issued by the Procuring Entity's authorized representative within forty five (45) days after successful test and commissioning, if required, the Supplier shall have the right to claim payment of the remaining twenty percent (20%) subject to the Procuring Entity's own verification of the reason(s) for the failure to issue documents (vii) and (viii) as described in the SCC provision on Delivery and Documents.

#### 2) For Supply, Delivery, Installation, Test and Commissioning Contracts:

- (a) On Contract Effectivity: Advance payment of Fifteen percent (15%) of the total Contract Price shall be paid within sixty (60) days from effectivity of the Contract and upon submission of a claim and an irrevocable letter of credit or bank guarantee issued by a Universal or Commercial Bank for the equivalent amount valid until the Goods are delivered and in the form provided in Section VIII- Bidding Forms.
- (b) On Delivery: Eighty percent (80%) of the price of the delivered Goods, excluding price for installation, test and commissioning shall be considered for payment, less the total amount of advance payment, if any and other deductions. If the amount is sufficient to fully recoup the advance payment, the remainder after deductions shall be paid to the Supplier within sixty (60) days after the date of receipt of the Goods and upon submission of the documents (i) through (vi) specified in the SCC provision on Delivery and Documents. Otherwise, the total delivery

payment shall be charged against the advance payment and the remaining advance payment will be fully recouped from the succeeding

- (c) On Acceptance: The remaining twenty percent (20%) of the price of the delivered Goods plus price for installation, test and commissioning shall be paid to the Supplier within sixty (60) days after the date of submission of the acceptance and inspection certificate for the respective delivery issued by the Procuring Entity's authorized representative. In the event that no acceptance certificate is issued by the Procuring Entity's authorized representative within forty five (45) days after successful test and commissioning, the Supplier shall have the right to claim payment subject to the Procuring Entity's own verification of the reason(s) for the failure to issue documents (vii) and (viii) as described in the SCC provision on Delivery and Documents.
- 3) For Supply, Delivery, Installation, Test and Commissioning Contracts where Installation, Test and Commissioning prices are included in the supply price:
  - On Contract Effectivity: Advance payment of Fifteen percent (15%) of the total Contract Price shall be paid within sixty (60) days from effectivity of the Contract and upon submission of a claim and an irrevocable letter of credit or bank guarantee issued by a Universal or Commercial Bank for the equivalent amount valid until the Goods are delivered and in the form provided in Section VIII- Bidding Forms.
  - On Delivery: Sixty percent (60%) of the price of the delivered Goods shall be considered for payment, less the total amount of advance payment, if any and other deductions. If the amount is sufficient to fully recoup the advance payment, the remainder after deductions shall be paid to the Supplier within sixty (60) days after the date of receipt of the Goods and upon submission of the documents (i) through (vi) specified in the SCC provision on Delivery and Documents. Otherwise, the total delivery payment shall be charged against the advance payment and the remaining advance payment will be fully recouped from the succeeding claims.
  - (c) On Acceptance: The remaining forty percent (40%) of the price of the delivered Goods shall be paid to the Supplier within sixty (60) days after the date of submission of the acceptance and inspection certificate for the respective delivery issued by the Procuring Entity's authorized representative. In the event that no acceptance certificate is issued by the Procuring Entity's authorized representative within forty five (45) days after successful test and commissioning, the Supplier shall have the right to claim payment subject to the Procuring Entity's own verification of the reason(s) for the failure to issue documents (vii) and (viii) as described in the SCC provision on Delivery and Documents

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3.2	The following must be indicated in the performance bond to be posted by the Contractor:
	<ul> <li>i. Company Name</li> <li>ii. Correct amount of the Bond</li> <li>iii. Contract/Purchase Order Reference Number</li> <li>iv. Purpose of the Bond:</li> <li>"To guarantee the faithful performance of the Principal's obligation to undertake (Contract/Purchase Order Description) in accordance with the terms and conditions of (Contract No. &amp; Schedule/Purchase Order No.) entered into by the parties."</li> </ul>
	<ol> <li>The bond shall remain valid and effective until the duration of the contract (should be specific date reckoned from the contract effectivity) plus sixty (60) days after NPC's acceptance of the last delivery/final acceptance of the project.</li> </ol>
	3. In case of surety bond, any extension of the contract duration or delivery period granted to the CONTRACTOR shall be considered as given, and any modification of the contract shall be considered as authorized, as if with the expressed consent of the surety, provided that such extension or modifications fails within the effective period of the said surety bond. However, in the event that the extension of the contract duration or delivery schedule would be beyond the effective period of the surety bond first posted, it shall be the sole obligation of the CONTRACTOR to post an acceptable Performance Security within ten (10) calendar days after the contract duration/delivery period extension has been granted by NPC.
	Other required conditions in addition to the standard policy terms issued by the Bonding Company:
	<ol> <li>The bond is a penal bond, callable on demand and the entire amount thereof shall be forfeited in favor of the Obligee upon default of the Principal without the need to prove or to show grounds or reasons for demand for the sum specified therein;</li> </ol>
	ii. The amount claimed by the Obligee under this bond shall be paid in full and shall never be subject to any adjustment by the Surety;
	iii. In case of claim, the Surety shall pay such claim within sixty (60) days from receipt by the Surety of the Obligee's notice of claim/demand letter notwithstanding any objection thereto by the Principal.

The inspections and tests that will be conducted are specified in the Technical

Specifications.

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## **SECTION VI**

# **TECHNICAL SPECIFICATIONS**

(PART I - TECHNICAL SPECIFICATIONS)

# Section VI - Technical Specifications Part I - Technical Specifications

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#### Section VI - Technical Specifications

#### Part I - Technical Specifications

#### TS-1.0 GENERAL

This specification covers the features and technical requirements for the SUPPLY AND DELIVERY OF ELECTRICAL SECURITY SPARE PARTS FOR 20MVA MOGPOG SUBSATION.

All supplied spare parts shall be new and unused. They shall be suitable for the intended purpose and shall comply with all applicable regulations, quality, and dimension standards.

The Supplier shall accept full responsibility for his work including documentation, preparation for shipment, inspection, warranty provisions and compliance with the applicable codes and standards and the requirements of this Specification.

#### TS-2.0 SCOPE OF WORKS

The scope of work shall cover the SUPPLY AND DELIVERY OF ELECTRICAL SECURITY SPARE PARTS FOR 20MVA MOGPOG SUBSATION.

#### Schedule of Requirements of Spare Parts

ITEM	DESCRIPTION	QTY.
1	Breaker, VCB, VD4 EL-EP 17.5KV, 1250A-25KA	1 Piece
2	Automatic Voltage Regulator (AVR), ET-SZ6 AVR	2 Piece
3	Breaker, IC65N -125V 6KA	2 Piece
4	Breaker VCB, VD4 EL-EP 17.5kV, 630A-25kA	1 Piece
5	Circuit Breaker, IC65N	2 Piece
6	Circuit Breaker, Miniature, NDB2-63 C1	2 Piece
7	Circuit Breaker, Miniature, NDB2-63 C16	2 Piece
8	Circuit Breaker, Miniature, NDB2-63 IN=3	2 Piece
9	Meter, Active Energy Type BIV3, POWERLOGIC PM5100	2 Piece
10	Relay, Distance Protection NR PCS-902 Line Distance Relay	1 Unit
11	Relay, NR CJX Interposing Relay	2 Piece
12	Relay, NR PCS-9611 Feeder Relay	3 Unit
13	Relay, Auxiliary, NR PCS-974 Transformer Aux. Relay	1 Piece

#### TS-3.0 DELIVERY PERIOD AND LOCATION

The delivery period shall be **ONE HUNDRED FIFTY (150) CALENDAR DAYS** reckoned from receipt of Notice to Proceed.

The spare parts shall be delivered to <u>MARINDUQUE 69KV TRANSMISSION</u> <u>LINE AND SUBSTATION, BRGY. JANAGDONG, MOGPOG, MARINDUQUE.</u>

The Supplier shall be responsible for visiting the site and take particular reference to its accessibility, means of communication and transportation, and all other factors that could hamper the smooth execution of the contract.

Any and/or all expenses arising through the lack of knowledge or understanding regarding the existing conditions of the site shall be the responsibility of the Supplier and no additional payment thereof shall be made by NPC.

#### TS-4.0 ACCEPTANCE CRITERIA

The Supplier shall perform at his own expense all inspection required to ensure adequacy of design, material, workmanship and conformance of the supplied spare parts to the requirements of the specifications and standards.

Necessary inspections at the place of delivery shall also be conducted with the presence of NPC representative.

Upon arrival of spare parts at delivery site, NPC and the Supplier or their authorized representatives, shall jointly verify the spare parts following the steps below:

- a. Inspection and verification of the packing list;
- Visual inspection of the condition of the packing and its surfaces; and
- c. Partial opening of the crates and plastic sheet protection of spare parts to verify the content and its physical condition and to check pilferage or damage during shipment and storage.

A record shall be prepared carefully noting all eventual shortages, defects or damages, signed by the Supplier and concurred by NPC. All shortages and damages noted shall be immediately replaced by the Supplier at his own cost and shall ensure the timely delivery of replacement without affecting the agreed overall contract implementation schedule.

Acceptance certificate shall be issued only after all the required inspection and verification are satisfactorily conducted and performed.

If any spare part fails to pass the inspection, NPC may at his own judgment, direct the Supplier to replace the spare parts.

#### TS-5.0 DRAWINGS AND DOCUMENTS TO BE SUBMITTED

- a. To be submitted with the bid
  - a.1 Completely filled-out Technical Data Sheets.
  - a.2 Original copy of manufacturer/distributor Authorization to bid for <u>Circuit</u> <u>Breaker and Protection Relay</u>, directly addressed to the BAC-NPC, indicating therein the PR/Reference number.

Note: Authorization to bid and Certificate of Distributorship from the Manufacturer shall be current and valid on the date of bid opening as advertised.

In case of authorized Distributor issuing the authority to bid, it shall be accompanied by a Certificate of Authorized Distributorship from the Manufacturer.

- b. To be submitted before/ during delivery of spare parts
  - b.1 "Certificate of Origin" from the Manufacturer.
  - b.2 "Warranty" Certificate for one (1) year against factory defects/workmanship.

#### TS-6.0 GUARANTEE

The Supplier shall guarantee the replacement of the supplied spare parts at his own expense against defect in design, workmanship and materials for a period of one (1) year after acceptance by NPC.

The Supplier shall submit a Warranty Certificate (at least 1 year) effective from the date of acceptance by NPC.

#### **PART II – TECHNICAL DATA SHEETS**

# SUPPLY AND DELIVERY OF ELECTRICAL SECURITY SPARE PARTS FOR 20MVA MOGPOG SUBSTATION

- The Bidder shall complete this technical data sheet and submit the filled-up form with the technical proposal.
   The Bidder shall use continuation sheets as necessary for any other additional information keeping to the format shown herein or by reproducing the same.
- 2. NPC reserves the right to reject Bids without proper and/or specific data and information as required herein.
- The data required are technical features and characteristics of the Equipment/Component/Parts to be provided by the bidder. Bidder's proposal shall at least be equal or superior to the requirements specified by NPC.

#### 1.0 SPARE PARTS DATA

ITE M	DESCRIPTION	NPC REQUIREMENTS			DETAILS OF ABC	
		PART NO.	QTY.		PART NO.	QTY
1 .	Breaker, VCB, VD4 EL-EP 17.5KV, 1250A-25KA	N/A	1	Pc		
2	Automatic Voltage Regulator (AVR), ET-SZ6 AVR	N/A	2	Pc		
3	Breaker, IC65N -125V 6KA	N/A	2	Pc		
4	Breaker VCB, VD4 EL-EP 17.5kV, 630A-25kA	N/A	1	Pc		
5	Circuit Breaker, IC65N	N/A	2	Pc		
6	Circuit Breaker, Miniature, NDB2-63 C1	N/A	2	Pc		
7	Circuit Breaker, Miniature, NDB2-63 C16	N/A	2	Pc		
8	Circuit Breaker, Miniature, NDB2-63 IN=3	N/A	2	Pc	<del></del>	
9	Meter, Active Energy Type BIV3, POWERLOGIC PM5100	N/A	2	Pc		
10	Relay, Distance Protection NR PCS- 902 Line Distance Relay	N/A	1	Unit		
11	Relay, NR CJX Interposing Relay	N/A	2	Pc		
12	Relay, NR PCS-9611 Feeder Relay	N/A	3	Unit		
13	Relay, Auxiliary, NR PCS-974 Transformer Aux. Relay	N/A	1	Pc		

Note:

\*Supplier refers to those who secured the Authority to Bid from the Manufacturer stated under a.1.2

TS- DRAWINGS AND DOCUMENTS TO BE SUBMITTED (Section VI – Technical Specifications)

(a.1.2. Original copy of manufacturer/distributor Authorization to bid for Circuit Breaker and Protection Relay, directly addressed to the BAC-NPC, indicating therein the PR/Reference number.

Note: Authorization to bid and Certificate of Distributorship from the Manufacturer shall be current and valid on the date of bid opening as advertised.

In case of authorized Distributor issuing the authority to bid, it shall be accompanied by a Certificate of Authorized Distributorship from the Manufacturer.

	· <u>-</u>	
Name of Bidder	Name and Signature of Authorized Representative	Signature

## Section VI - Technical Specifications

### Part II - Technical Data Sheets

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	•	

#### **SECTION VII**

# **SCHEDULE OF** REQUIREMENTS

#### Section VII - SCHEDULE OF REQUIREMENTS

#### ( Bid Price Schedule )

#### SUPPLY AND DELIVERY OF ELECTRICAL SECURITY SPARE PARTS FOR 20MVA MOGPOG SUBSTATION

				c	UNIT	PRICE FOR GOODS AND	RELATED SERVICES TO	BE SUPPLIED AND DEL	IVERED	TOTAL PRICE
ITEM NO.	DESCRIPTION	QTY	UNIT	, O E	Total Price of Goods Delivered up to Phillppine Port (Phil. Peso)+	Import Dutles & other Levies Imposed by Phil. Govt. (Phil. Peso)	Value Added Tax and other Taxes Imposed by Phil. Govt. (Phil. Peso)	Local Transport from Port to Delivery Site (Phil. Peso)<	Total Unit Price (Phil. Peso) ( E+F+G+H )	Local Currency (Phil. Peso) ( J = I x C )
(A)	(8)	(	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)
	Oresker, VCB, VD4 EL-EP 17.5KV, 12504-25KA	1	Piece			l				
2	Automatic Voltage Regulator (AVR), CT-SZ6 AVR	2	Piece							
3	Breaker, IC65N -125V EKA	2	Piece						<u> </u>	
_4	Breaker VCB, VD4 EL-EP 17-5kV, 630A 251A	1	Piece				<u>.</u>			
5	Circuit Breaker, IC65N	2	Piece			ļ. <u>-—</u> —				<u> </u>
-6	Circuit Breaker, Ministure, NDB2-63 C1	2	P.ece							<u> </u>
7	Circuit Sreaker, Miniature, NDB2-63 C16	2	Piece				<u> </u>			<u> </u>
В.	Circuit Breaker, Miniature, NDB2-63 IN=3	2	Piece	<u> </u>						
9	Meter, Active Chergy Type BIV3, POWERLOGIC PM5100	2	Piece				·		<del>_</del>	
10	Relay, Distance Protection NR PCS-902 Line Distance Relay	1	Unit		<u> </u>		[			
11	Relay, NR CXX Interposing Relay	2	Piece			. <u>- — — </u>				
12	Relay, NR PCS-9611 Feeder Relay	. 3	Unit	<u> </u>						
13	Relay, Auxiliary, NR PCS-974 Transformer Aux, Relay	1	Piete			<u></u>		<b></b>		
]	x x x x x			[						
		<u></u>	<u> </u>	Ll				<del></del>		
	TOTAL		_							P
	10174					(Amount in Words)				

•	Bidders shall enter a code representing the Country of Origin of all imported
	equipment, materials and accessories

- + Cost of equipment, freight, insurance, etc. up to Phil. port of entry
- Unit Price for Local Transportation, insurance and other local costs incidental to delivery of the goods from the Phil port of entry to final delivery site

#### Note:

Final delivery sites of Spare parts shall be at Marindoque 69XV Transmission line and Substation, Brgy. Janagdong, Mospog, Manindoque

<u> </u>	 	

Code

Name of Bidder:

Signature of Bidder:

Country of Origin

#### **SECTION VIII**

# **BIDDING FORMS**

#### **SECTION VIII - BIDDING FORMS**

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NPCSF-GOODS-01	-	Checklist of Technical and Financial Envelope Requirements for Bidders
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NPCSF-GOODS-05	-	Joint Venture Agreement
NPCSF-GOODS-06a	-	Form of Bid Security : Bank Guarantee
NPCSF-GOODS-06b	-	Form of Bid Security : Surety Bond
NPCSF-GOODS-06c	-	Bid Securing Declaration Form
NPCSF-GOODS-07	-	Omnibus Sworn Statement (Revised)
NPCSF-GOODS-08	-	Bid Letter
Sample Form	-	Bank Guarantee Form for Advance Payment
Sample Form	-	Certification from DTI as Domestic Bidder

#### Checklist of Technical & Financial Envelope Requirements for Bidders

#### A. THE 1ST ENVELOPE (TECHNICAL COMPONENT) SHALL CONTAIN THE FOLLOWING:

- 1. ELIGIBILITY DOCUMENTS
  - a. (CLASS A)
  - Any of the following:
    - PhilGEPS Certificate of Registration and Membership under Platinum Category in accordance with Section 8.5.2 of the IRR:

#### OR:

- The following updated and valid Class "A" eligibility documents enumerated under "Annex A" of the Platinum Membership:
  - Registration Certificate from the Securities and Exchange Commission (SEC) for corporations, Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives:
  - Mavor's/Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas.
    - In cases of recently expired Mayor's/Business permits, it shall be accepted together with the official receipt as proof that the bidder has applied for renewal within the period prescribed by the concerned local government unit, provided that the renewed permit shall be submitted as a post qualification requirement in accordance with Section 34.2 of the Revised IRR of RA 9184.
  - The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission.
  - Tax clearance per Executive Order 398. Series of 2005, as finally reviewed and approved by the BIR or as stated under GPPB NPM-039-2014, for Non-Resident Foreign Corporation (NRFC) and Non-Resident Alien Not Engaged in Trade or Business (NRANETB), a Delinquency Verification Certificate may be submitted as a form of Tax Clearance:

#### OR:

- A combination thereof
- Statement of all its ongoing government and private contracts if any, whether similar or not similar in nature and complexity to the contract to be bid(NPCSF-GOODS-02)
- > The Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, and whose value, adjusted to current prices using the Philippine Statistics Authority (PSA) consumer price index, must be at least 50% of the ABC (NPCSF-GOODS-03) complete with the following supporting documents:
  - Contract/Purchase Order
  - 2. Certificate of Acceptance; or Certificate of Completion; or Official Receipt (O,R); or Sales Invoice

(The Single Largest Completed Contract (SLCC) as declared by the bidder shall be verified and validated to ascertain such completed contract. Hence, bidders must ensure access to sites of such projects/equipment to NPC representatives for verification and validation purposes during post-qualification process.

It shall be a ground for disqualification, if verification and validation cannot be conducted for reasons attributable to the Bidder.)

Duly signed computation of its Net Financial Contracting Capacity (NFCC) at least equal to the ABC (NPCSF-GOODS-04) ora Committed Line of Credit (CLC) at least equal to ten percent (10%) of the ABC, issued by a Universal or Commercial Bank; If the Bidder opted to submit a Committed Line of Credit (CLC), the bidder must submit a granted credit line valid/effective at the date of bidding.

#### b. (CLASS B)

- For Joint Venture (if applicable), any of the following:
  - Valid Joint Venture Agreement(NPCSF-GOODS-05)

OR

- Notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA, if awarded the contract
- Certification from the relevant government office of their country stating that Filipinos are allowed to participate in their government procurement activities for the same item/product (For foreign bidders claiming eligibility by reason of their country's extension of reciprocal rights to Filipinos)

#### 2. Technical Documents

- Bid Security, any one of the following:
  - Bid Securing Declaration (NPCSF-GOODS-06c)

OR

Cash or Cashier's/Manager's check issued by a Universal or Commercial Bank - 2% of ABC;

OR

Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: (NPCSF-GOODS-06a) - 2% of ABC;

OR

- Surety Bond callable upon demand issued by a reputable surety or insurance company (NPCSF-GOODS-06b)- 5% of ABC, with
  - Certification from the Insurance Commission as authorized company to issue surety
- Duly signed, completely filled-out and notarized Omnibus Sworn statement (Revised) (NPCSF-GOODS-07), complete with the following attachments:
  - For Sole Proprietorship:
    - Special Power of Attorney
  - For Partnership/Corporation/Cooperative/Joint Venture:
    - Document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)

Page 2 of 3

- Data and Information to be submitted with the Bid/Proposal as specified in the Clause TS-5.0 of Section VI - Technical Specifications (if any or if applicable)
- Complete eligibility documents of the proposed subcontractor, if any

#### B. THE 2<sup>ND</sup> ENVELOPE (FINANCIAL COMPONENT) SHALL CONTAIN THE FOLLOWING:

- Duly signed Bid Letter indicating the total bid amount in accordance with the prescribed form (NPCSF-GOODS-08)
- Duly signed and completely filled-out Schedule of Requirement (Section VII) indicating the unit and total prices per item and the total amount in the prescribed Price Schedule form.
- For Domestic Bidder claiming for domestic preference:
  - Letter address to the BAC claiming for preference
  - Certification from DTI as Domestic Bidder in accordance with the prescribed forms provided

#### **CONDITIONS:**

- Each Bidder shall submit one copy of the first and second components of its Bid. NPC may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.
- 2. In the case of foreign bidders, the eligibility requirements under Class "A" Documents (except for Tax Clearance) may be substituted by the appropriate equivalent documents, if any, issued by the country of the foreign bidder concerned. The eligibility requirements or statements, the bids, and all other documents to be submitted to the BAC are in foreign language other than English, it must be accompanied by a translation of the documents in English. The documents shall be translated by the relevant foreign government agency, the foreign government agency authorized to translate documents, or a registered translator in the foreign bidder's country; and shall be authenticated by the appropriate Philippine foreign service establishment/post or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines.
  - These documents shall be accompanied by a Sworn Statement in a form prescribed by the GPPB stating that the documents submitted are complete and authentic copies of the original, and all statements and information provided therein are true and correct. Upon receipt of the said documents, the PhilGEPS shall process the same in accordance with the guidelines on the Government of the Philippines Official Merchants Registry (GoP-OMR).
- A Bidder not submitting bid for reason that his cost estimate is higher than the ABC, is required to submit his letter of non-participation/regret supported by corresponding detailed estimates. Failure to submit the two (2) documents shall be understood as acts that tend to defeat the purpose of public bidding without valid reason as stated under Section 69.1.(i) of the revised IRR of R.A. 9184.

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Standard Form Number: NPCSF-GOODS-02

#### List of All Ongoing Government and Private Contracts Including Contract Awarded But Not Yet Started

			Bidder's Role	e	a. Date Awarded	
Name of Contract/ Project Cost  a. Owner's Name b. Address Natur c. Telephone Nos.	Nature of Work	Description	%	b. Date Started c. Date of Completion or Contract Duration/ Date of Delivery	Value of Outstanding Works / Undelivered Portion	
overnment						
		<u> </u>	<u>,                                    </u>		<u></u>	
				<del> </del>		
vale			<u> </u>			
				<u> </u>		
				<u> </u>		<del></del>
<del></del>						
					Total Cost	

The bidder shall declare in this form all his on-going government and private contracts including contracts where the bidder (either as individual or as a Joint Venture) is a partner in a Joint Venture agreement other than his current joint venture where he is a partner. Non declaration will be a ground for disqualification of bid.

Note: This statement shall be supported with the following documents for all the contract(s) stated above which shall be submitted during Post-qualification:

- 1. Contract/Purchase Order and/or Notice of Award
- 2. Certification coming from the project owner/client that the performance is satisfactory as of the bidding date.

Submitted by	I	
•		(Printed Name & Signature)
Designation	I	
Date	:	

- DIBBIRG COLUMN

Standard Form Number: NPCSF-GOODS-03

Business Name : . Business Address : .						
	a. Owner's Name		Contractor's Rol	le	a.Amount at Award	a. Date Awarded
Name of Contract	b. Address c. Telephone Nos.	Nature of Work	Description	%	b.Amount at Completion c. Duration	b. Contract Effectivity c. Date Completed
				,		
<ol><li>Supporting doc</li></ol>	uments such as Contract/Purch	est Completed Contract (SLCC) ase Order and any of the follow ill be submitted during Bid Open	ing: Certificate of Accepta	o be bid. lance; <i>or</i>	Certificate of Completion; or	Official Receipt (O.R); or
Submitted by :	(Printed Name & Signal	ura)				
Designation :	(Fillited Name & Oighan					

#### **NET FINANCIAL CONTRACTING CAPACITY (NFCC)**

A. Summary of the Supplier's/Distributor's/Manufacturer's assets and liabilities on the basis of the income tax return and audited financial statement for the immediately preceding calendar year are:

		Year 20
1.	Total Assets	
2.	Current Assets	
3.	Total Liabilities	
4.	Current Liabilities	
5.	Net Worth (1-3)	
6.	Net Working Capital (2-4)	

B. The Net Financial Contracting Capacity (NFCC) based on the above data is computed as follows:

NFCC = [(Current assets minus current liabilities) x 15] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract for this Project.

Herewith attached is certified true copy of the audited financial statement, stamped "RECEIVED" by the BIR or BIR authorized collecting agent for the immediately preceding calendar year.

Submitted by:
Name of Supplier / Distributor / Manufacturer
Signature of Authorized Representative
Poto :

#### JOINT VENTURE AGREEMENT

	NT is entered into by and between:  vil status), authorized representative of							
- and—								
, of legal age, <u>(civil status)</u> , authorized representative of, a resident of								
That both parties agree to join together resources and efforts to enable the Joint Venture the hereunder stated Contract of the National Po	their capital, manpower, equipment, and other to participate in the Bidding and Undertaking of ower Corporation.							
NAME OF PROJECT	CONTRACT AMOUNT							
That the capital contribution of each men	nber firm:							
NAME OF FIRM	CAPITAL CONTRIBUTION							
1.	8							
2.	Þ							
That both parties agree to be jointly a Bidding and Undertaking of the said contract.	nd severally liable for their participation in the							
That both parties agree that and/or shall be the Official Representative/s of the Joint Venture, and are granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the Joint Venture in the Bidding and Undertaking of the said contract, as fully and effectively and the Joint Venture may do and if personally present with full power of substitution and revocation.  That this Joint Venture Agreement shall remain in effect only for the above stated Contract until terminated by both parties.								
Name & Signature of Authorized	Name & Signature of							
Representative	Authorized Representative							
Official Designation	Official Designation							
Name of Firm	Name of Firm							
1	esses 2							

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

Standard Form Number: NPCSF-GOODS-06a

#### FORM OF BID SECURITY (BANK GUARANTEE)

where where the bidder (Name of Bidder) (hereinafter called "the Bidder") has submitted his bid dated (Date) for the <u>[name of project]</u> (hereinafter called "the Bid").
KNOW ALL MEN by these presents that We (Name of Bank)  (Name of Country)  having our registered office at (hereinafter called "the Bank" are bound unto National Power Corporation (hereinafter called "the Entity") in the sum of [amount in words & figures as prescribed in the bidding documents] for which payment well and truly to be made to the said Entity the Bank binds himself, his successors and assigns by these presents.
SEALED with the Common Seal of the said Bank this day of 20
THE CONDITIONS of this obligation are that:
<ol> <li>if the Bidder withdraws his Bid during the period of bid validity specified in the Bidding Documents; or</li> </ol>
<ol> <li>if the Bidder does not accept the correction of arithmetical errors of his bid price in accordance with the Instructions to Bidder; or</li> </ol>
<ol> <li>if the Bidder, having determined as the LCB, fails or refuses to submit the required tax clearance, latest income and business tax returns and PhilGEPs registration certificate within the prescribed period; or</li> </ol>
4) if the Bidder having been notified of the acceptance of his bid and award of contract to him by the Entity during the period of bid validity:
a) fails or refuses to execute the Contract; or
b) fails or refuses to submit the required valid JVA, if applicable; or
<ul> <li>c) fails or refuses to furnish the Performance Security in accordance with the Instructions to Bidders;</li> </ul>
we undertake to pay to the Entity up to the above amount upon receipt of his first written demand, without the Entity having to substantiate its demand, provided that in his demand the Entity will note that the amount claimed by it is due to the occurrence of any one or combination of the four (4) conditions stated above.
The Guarantee will remain in force up to 120 days after the opening of bids or as it may be extended by the Entity, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.
DATE SIGNATURE OF THE BANK
WITNESS SEAL
(Signature, Name and Address)

Standard Form Number: NPCSF-GOODS-06b

#### FORM OF BID SECURITY (SURETY BOND)

BOND	NO.: DATE BOND EXECUTED:
of Sun transacunto N (amou payme oursel	s bond, We ( <u>Name of Bidder</u> ) (hereinafter called "the Principal") and <u>(Name ety)</u> of ( <u>Name of Country of Surety</u> ) , authorized to ct business in the Philippines (hereinafter called "the Surety") are held and firmly bound lational Power Corporation (hereinafter called "the Employer") as Obligee, in the sum of <u>Int in words &amp; figures as prescribed in the bidding documents</u> , callable on demand, for the ent of which sum, well and truly to be made, we, the said Principal and Surety bind wes, our successors and assigns, jointly and severally, firmly by these presents.
WHER	REAS, the Principal has submitted a written Bid to the Employer dated the day of, for the (hereinafter called "the Bid").
NOW,	THEREFORE, the conditions of this obligation are:
1)	if the Bidder withdraws his Bid during the period of bid validity specified in the Bidding Documents; or
2)	if the Bidder does not accept the correction of arithmetical errors of his bid price in accordance with the Instructions to Bidder; or
3)	if the Bidder, having determined as the LCB, fails or refuses to submit the required tax clearance, latest income and business tax returns and PhilGEPs registration certificate within the prescribed period; or
4)	if the Bidder having been notified of the acceptance of his bid and award of contract to him by the Entity during the period of bid validity:
	d) fails or refuses to execute the Contract; or
	e) fails or refuses to submit the required valid JVA, if applicable; or
	<ul> <li>f) fails or refuses to furnish the Performance Security in accordance with the Instructions to Bidders;</li> </ul>
then th	nis obligation shall remain in full force and effect, otherwise it shall be null and void.
PROV	IDED HOWEVER, that the Surety shall not be:
	(a) liable for a proplet own than the smallful as all, of this bound on

- a) liable for a greater sum than the specified penalty of this bond, nor
- b) liable for a greater sum that the difference between the amount of the said Principal's Bid and the amount of the Bid that is accepted by the Employer.

Standard Form Number: NPCSF-GOODS-06b Page 2 of 2

This Surety executing this instrument hereby agrees that its obligation shall be valid for 120 calendar days after the deadline for submission of Bids as such deadline is stated in the instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Surety is hereby waived.

PRINCIPAL	SURETY
SIGNATURE(S)	SIGNATURES(S)
NAME(S) AND TITLE(S)	NAME(S)
SEAL	SEAL

REPUBLIC OF THE PHILIPPINES)	
CITY OF	) S.S.

#### BID-SECURING DECLARATION SUPPLY AND DELIVERY OF ELECTRICAL SECURITY SPARE PARTS FOR 20MVA SUBSTATION PR NO. S1-M6923-008

To: National Power Corporation BIR Road cor. Quezon Ave. Diliman, Quezon City

I/We<sup>1</sup>, the undersigned, declare that:

- 1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid-Securing Declaration.
- 2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the Procuring Entity for the commission of acts resulting to the enforcement of the Bid Securing Declaration under Sections 23.1 (b), 34.2, 40.1 and 69.1, except 69.1 (f) of the IRR of R.A. 9184; without prejudice to other legal action the government may undertake.
- 3. I/We understand that this Bid-Securing Declaration shall cease to be valid on the following circumstances:
  - Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
  - I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) //we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;
  - I am/we are declared as the bidder with the Lowest Calculated and Responsive Bid, and I/we have furnished the performance security and signed the Contract.

	IN WITNESS	WHEREOF, I	<i>l/we</i> have	hereunto	set my	hand this	day of	•
20		, Philippine			•		′	

[Name and Signature of Bidder's Representative/ Authorized Signatory] [Signatory's legal capacity] Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

<sup>&</sup>lt;sup>1</sup> Select one and delete the other. Adopt same instruction for similar terms throughout the document.

#### Omnibus Sworn Statement (Revised)

REPUBLIC OF THE PHILIPPINES	3)
CITY/MUNICIPALITY OF	) S.S

#### **AFFIDAVIT**

- I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:
- 1. [Select one, delete the other:]

[If a sole proprietorship:] I am the sole proprietor or authorized representative of [Name of Bidderl with office address at [address of Bidderl:

[If a partnership, corporation, cooperative, or joint venture:] I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

Select one, delete the other:1

[If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

[If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached (state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable:)]:

- 3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;
- 4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
- 5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;
- (Select one, delete the rest:)

[If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a partnership or cooperative:] None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

- 7. [Name of Bidder] complies with existing labor laws and standards; and
- 8. [Name of Bidder] is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
  - a. Carefully examining all of the Bidding Documents;
  - Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
  - Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
- [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
- 10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

IN	WITNESS	WHEREOF,	1 ha	ıve	hereunto	set	my	hand	this		day	of	20	at
_		, Philippines.								_	-		 _	

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE] [Insert signatory's legal capacity] Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

#### **BID LETTER**

Date:
To: THE PRESIDENT National Power Corporation BIR Road cor. Quezon Ave. Diliman, Quezon City
Gentlemen and/or Ladies:
Having examined the Bidding Documents including Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer to perform SUPPLY AND DELIVERY OF ELECTRICAL SECURITY SPARE PARTS FOR 20MVA MOGPOG SUBSTATION (PR NO.S1-M6923-008) in conformity with the said Bidding Documents for the sum of [total Bid amount in words and figures] or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.
We undertake, if our Bid is accepted, to supply and deliver the goods and perform other services, if required within the contract duration and in accordance with the scope of the contract specified in the Schedule of Requirements and Technical Specifications.
If our Bid is accepted, we undertake to provide a performance security in the form, amounts, and within the times specified in the Bidding Documents.
We agree to abide by this Bid for the Bid Validity Period specified in <u>BDS</u> provision for ITB Clause 18.2 and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.
We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.
We certify/confirm that we comply with the eligibility requirements as per ITB Clause 5 of the Bidding Documents.
We likewise certify/confirm that the undersigned, [for sole proprietorships, insert: as the owner and sole proprietor or authorized representative of [Name of Bidder] has the full power and authority to participate, submit the bid, and to sign and execute the ensuing contract, on the latter's behalf for the [Name of Project] of the National Power Corporation [for partnerships, corporations, cooperatives, or joint ventures, insert: is granted full power and authority by the [Name of Bidder] to participate, submit the bid, and to sign and execute the ensuing contract on the latter's behalf for [Name of Project] of the National Power Corporation.
We acknowledge that failure to sign each and every page of this Bid Letter, including the attached Schedule of Requirements (Bid Price Schedule), shall be a ground for the rejection of our bid.
[name and signature of authorized signatory] [In the capacity of]
Duly authorized to sign Bid for and on behalf of

#### Bank Guarantee Form for Advance Payment

To: THE PRESIDENT

National Power Corporation BIR Road cor. Quezon Ave. Diliman, Quezon City

[name of Contract]

#### Gentlemen and/or Ladies:

In accordance with the Advance Payment Provision, Clause 11 of the General Conditions of Contract, <u>Iname and address of Supplier</u>] (hereinafter called the "Supplier") shall deposit with the PROCURING ENTITY a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of <u>Inament of guarantee in figures and words</u>].

We, the <u>Iname of the universal/commercial bankl</u>, as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the PROCURING ENTITY on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding <u>[amount of guarantee in figures and words]</u>.

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

This guarantee shall remain valid and in full effect from the date the advance payment is received by the Supplier under the Contract and until the Goods are accepted by the PROCURING ENTITY.

Yours truly,

[name of bank or financial institution]	<del>-</del>
[address]	
[date]	

Signature and seal of the Guarantors

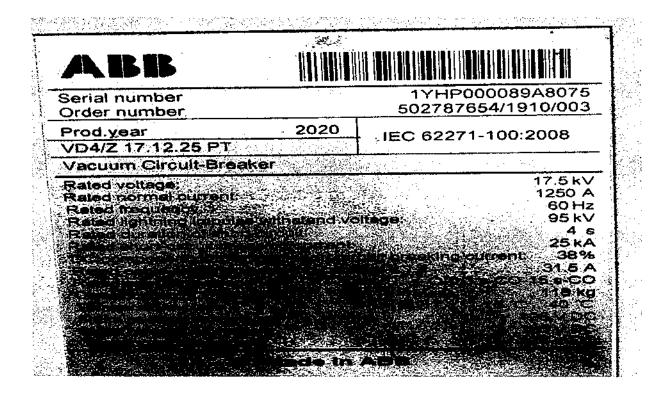
#### **CERTIFICATION AS A DOMESTIC BIDDER**

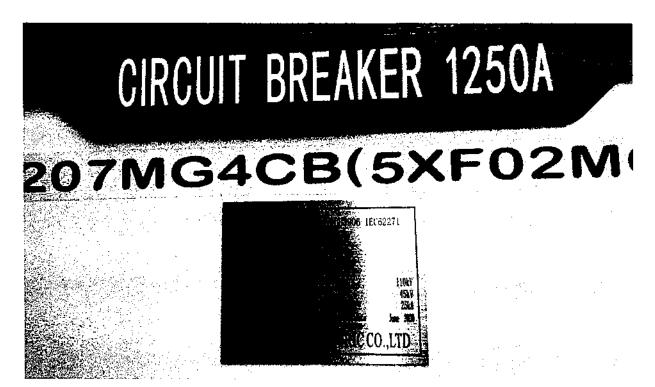
This is to certify that based on the records of this office	ce, <u>(Name of Bidder)</u> is
duly registered with the DTI on	
This further certifies that the articles forming part of the	ne product of (Name of Bidder)
which are/is (Specify)	are substantially composed of
articles, materials, or supplies grown, produced or manuf	actured in the Philippines. (Please
encircle the applicable description/s).	
This certification is issued upon the request of (Name	e of Person/Entity) in connection with
his intention to participate in the bidding for the	(Name of Project)
of the National Power Corporation (NPC).	
Given this day of20 at	, Philippines
	Name
_	Position
_	Department of Trade & Industry

#### **SECTION IX**

# **ANNEX A**

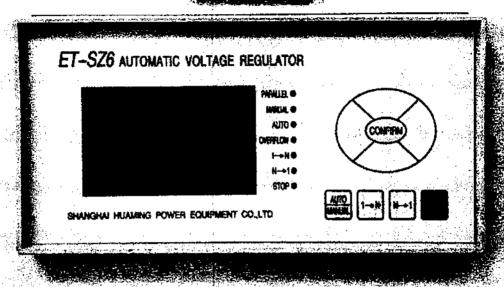
# Section IX - ANNEX A SPECIFICATIONS AND DRAWINGS





Item no. 2 Automatic Voltage Regulator, ET-SZ6 AVR

AI AVR ET SZ6



	. :				1
	VOLTAGE	REGULATIN	IG CONTROL	RELAY	ing the S
		ET-SZ		Annual Company	
A SELECT CIRCUIT	DIST	RIBUTIN	G POSITIO	)N	
MPUT		35			
OUTFOUT	BCE	CODE	10 SOUR	CE	
AUXILLARY POWER	AC	220V-2	40V±10%	6	
EXPERIMENT VOLTAGE	<u>_^</u> ^_	SE	RIAL NUMBI	ER	
	1/1	H1	80601023		
PRODUCE DATE		2018. 00	3		
SHANGHAIHUAN	IING POW	ER EQUIP	MENT CO.	LTD	

Item no. 3 Breaker, ICN65N - 125VDC, 6kA, 2-Poles

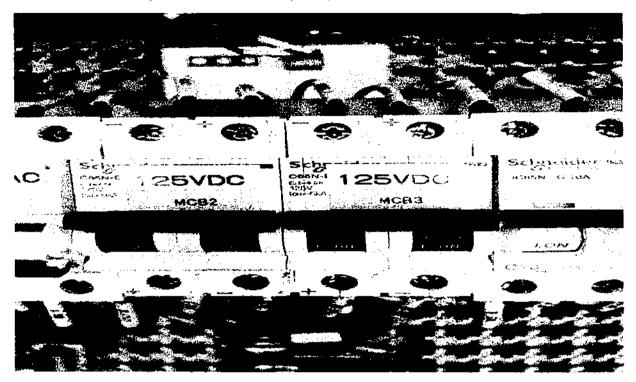
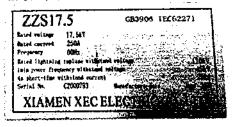
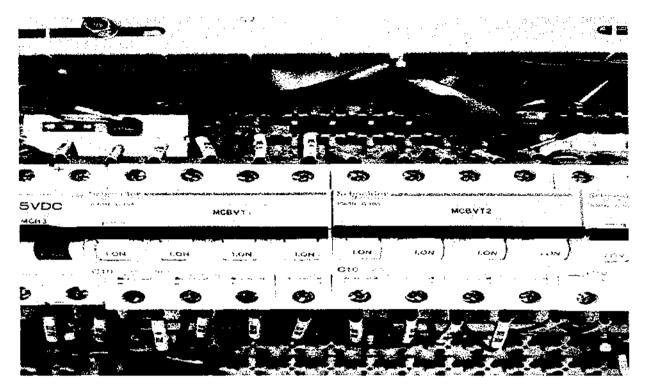


ABB		
Serial number Order number		1YHP000089A8078 502787655/1910/003
Prod.year VD4/Z 17.06.25 PT	2020	IEC 62271-100:2008
Vacuum Circuit-Breake	∍r	
Rated voltage: Rated normal current: Rated frequency: Rated lightning impulse thated duration of short charted short-alteriate the polyage of the particles of	ilrouit: ing current: ed short-circ esking curre	4 s 25 kA will breaking current: 38%

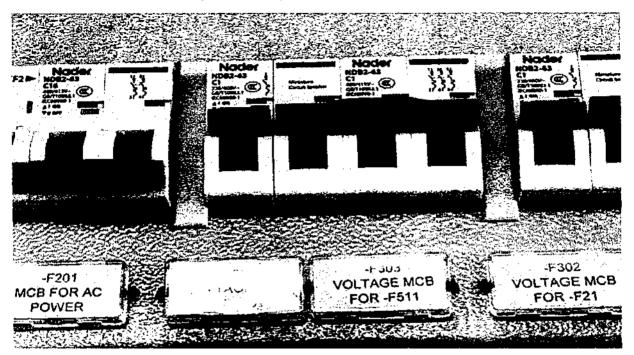
# CIRCUIT BREAKER 630A



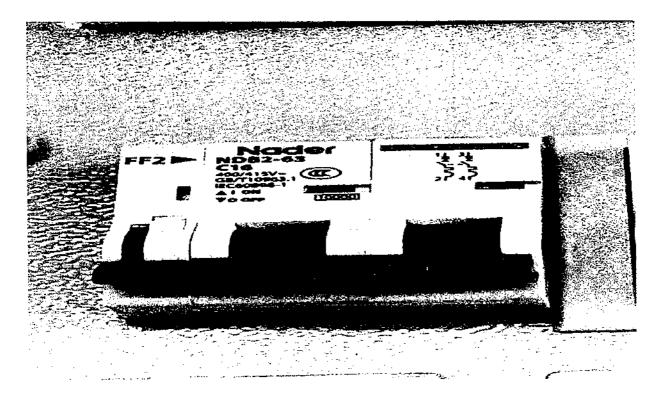
Item no. 5 Circuit Breaker, ICN65N, 10A, 4-Poles



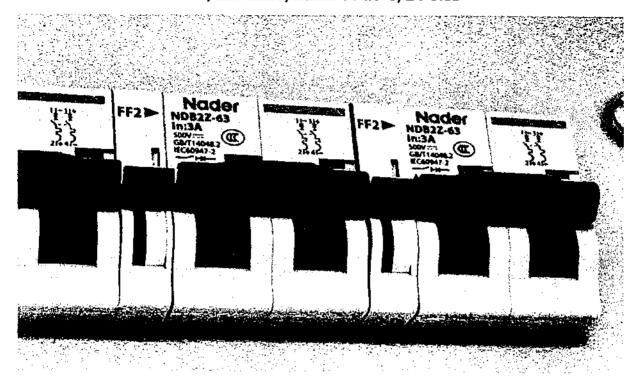
Item no. 6 Circuit Breaker, Miniature, NDB2-63-C1, 3P + N Pole



Item no. 7 Circuit Breaker, Miniature, NDB2-63-C16, 2 Poles

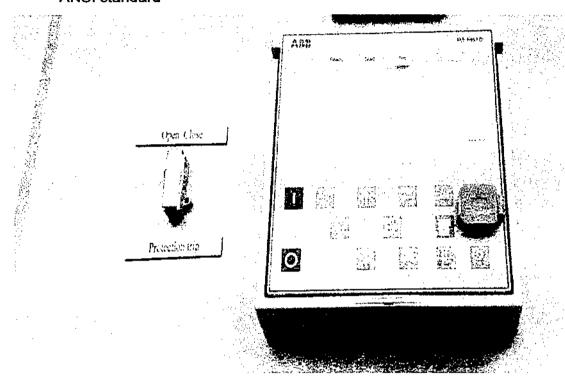


Item no. 8 Circuit Breaker, Miniature, NDB2-63-IN=3, 2 Poles



# Item No. 9 Meter, Active Energy - Type BIV3 Powerlogic PM5100 - REF615 IED series

- ANSI standard



#### 2.1 Electrical Specifications

#### **NOTICE!**

"System phase sequence", which can be set by PCS-Explorer, this setting informs the device of the actual system phase sequence, either ABC or ACB. CT and VT inputs on the device, labeled as A, B and C, must be connected to system phase A, B and C for correct operation.

#### 2.1.1 AC Current Input

Phase rotation	ABC or ACB		
Nominal frequency (fn)	50Hz, 60Hz		
Rated current (in)	1A	5A	
	0.05in~40in (it should measu	0.05ln~40in (it should measure current without beyond full scale against	
Linear to	20 times of related current and	20 times of related current and value of DC offset by 100%.)	
Thermal withstand			
-continuously	4In		
-for 10s	30in		
-for 1s	100in		
-for half a cycle	250in		
Burden	< 0.15VA/phase @In	< 0.25VA/phase @In	
Number	Up to 7 current input according to various applications		

#### 2.1.2 AC Voltage input

Phase rotation	ABC or ACB		
Nominal frequency (fn)	50Hz, 60Hz		
Rated voltage (Un)	100V~130V	100V~130V	
Linear to	1V~170V		
Thermal withstand	Phase-to-ground	Phase-to-phase	
-continuously	200V	346V	
-10s	260V	450V	
-1s	300V	519V	
Burden at rated	< 0.20VA/phase @Un		
Number	Up to 6 voltage input according to various applications		

#### 2.1.3 Power Supply

Standard	IEC 60255-26:2013	
Rated voltage	110Vdc/125Vdc/220Vdc/250Vdc	110Vac/220Vac
Permissible voltage range	88~300Vdc	88~264Vac
Permissible AC ripple voltage	≤15% of the nominal auxiliary voltage	
Burden		
Quiescent condition	<30W	
Operating condition	<35W	

PCS-902 Line Distance Relay

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#### 2.1.4 Binary input

#### 1. Settable pickup voltage and dropoff voltage

Rated voltage	110Vdc	220Vdc
Reted current drain	1.1mA	2.2mA
On value	85-132Vdc (default set)	170-264Vdc (default set)
Off value	<66Vdc	<132Vdc
Maximum permissible voltage	300Vdc	
Withstand voltage	2000Vac, 2800Vdc (continuously)	
Response time for logic input	≤1ms	
Number	Up to 54 binary input according to various hardware configurations	

#### 2. Fixed pickup voltage and dropoff voltage

Rated voltage	110Vdc	125Vdc	220Vdc	220Vdc
Rated current drain	1.1mA	1.25mA	2.2mA	2,85mA
On value	77-132Vdc	87.5-150Vdc	154-264Vdc	176-264Vdc
Off value	<55Vdc	<62.5Vdc	<110Vdc	<140Vdc
Maximum permissible voltage	300Vdc			
Withstand voltage	2000Vac, 2800Vdc (continuously)			
Response time for logic input	≤1ms			
Number	Up to 54 binary input according to various hardware configurations			

#### 2.1.5 Binary Output

#### 1. Tripping/signaling contact

Output mode	Potential free contact		
Maximal system voltage	380Vac, 250Vdc		
Continuous carry	8A		
Pickup time (Typical Value)	<5ms		
Dropoff time	<5ms		
	0.65A@48Vdc		
	0.35A@110Vdc		
Breaking capacity (L/R=40ms)	0.30A@125Vdc		
	0.20A@220Vdc		
	0.15A@250Vdc		
	12A@3s		
Ohad duration oursest	18A@1s		
Short duration current	24A@0.5s		
	40A@0.2s		
Durability (Loaded contact)	10000 operations		
Number	Up to 55 binary output according to various hardware configurations		

#### 2. Heavy-capacity tripping contact

		į
Output mode	Potential free contact	į
- Carpar mices	 	

PCS-902 Line Distance Relay



250Vdc
10A
<1ms
<10ms
10A
15A@3s
30A@1s
10000 operations
Up to 30 binary output according to various hardware configurations

#### 3. Fast signaling contact

Output mode	Potential free contact	
Maximal system voltage	380Vac, 250Vdc	
Continuous carry	5A	
Pickup time	<1ms	
Dropoff time	<5ms	
	0.65A@48Vdc	
	0.35A@110Vdc	
Breaking capacity (UR=0ms)	0.30A@125Vdc	
	0.20A@220Vdc	
	0.15A@250Vdc	
	8A@3s	
Object discretizes assessed	12A@1s	
Short duration current	16A@0.5s	
	30A@0.2s	
Durability (Loaded contact)	10000 operations	
Number	Up to 20 binary output according to various hardware configurations	

## 2.2 Mechanical Specifications

Mounting Way	Flush mounted	
Chassis color	Silver grey	
Weight per device	Approx. 15kg	
Chassis material	Aluminum alloy	
Location of terminal	Rear panel of the device	
Device structure	Plug-in modular type @ rear side, integrated frontplate	
Protection class		
Standard	IEC 60255-1:2009	
Front side	IP51	
Other sides	1P30	
Rear side, connection terminals	IP20	



#### 2.5.2 Mechanical Tests

Vibration	IEC 60255-21-1:1988 Class I	
Shock and bump	IEC 60255-21-2:1988 Class I	

#### 2.5.3 Electrical Tests

Standard		IEC 60255-27:2013	
Dielectric tests	ļ	Test voltage 2kV, 50Hz, 1min	
Impulse voltage tests		Test voltage 5kV	
Overvoltage category	1	Ш	· · · · · · · · · · · · · · · · · · ·
Insulation res	istance	Lesteries registrates a 400MAGGGGGGGGGGGGGG	
measurements		Isolation resistance >100MΩ@500VDC	

#### 2.5.4 Electromagnetic Compatibility

1MHz burst disturbance test	IEC 60255-26:2013
	Common mode: class III 2.5kV
	Differential mode: class III 1.0kV
Electrostatic discharge test  Radio frequency interference tests	IEC 60255-26:2013 class IV
	For contact discharge: 8kV
	For air discharge: 15kV
	IEC 60255-26:2013 class III
	Frequency sweep
	Radiated amplitude-modulated
	10V/m (rms), f=80~1000MHz
	Spot frequency
	Radiated amplitude-modulated
	10V/m (rms), f=80MHz/160MHz/450MHz/900MHz
	Radiated pulse-modulated
	10V/m (rms), f=900MHz
Fast transient disturbance tests	IEC 60255-26:2013
	Power supply, I/O, Earth: class TV, 4kV, 2.5kHz, 5/50ns
	Communication terminals: class IV, 2kV, 5kHz, 5/50ns
Surge immunity test	IEC 60255-26:2013
	Power supply, AC input, VO port: class TV, 1.2/50us
	Common mode: 4kV
	Differential mode: 2kV
Conducted RF Electromagnetic Disturbance	IEC 60255-26:2013
	Power supply, AC, I/O, Comm. Terminal: Class III, 10Vrms, 150
	kHz~80MHz
Power Frequency Magnetic Field Immunity	IEC 61000-4-8:2001
	class V, 100A/m for 1min, 1000A/m for 3s
Pulse Magnetic Field Immunity	IEC 61000-4-9:2001
	class V, 6.4/16µs, 1000A/m for 3s
Damped oscillatory magnetic field	IEC 61000-4-10:2001



immunity	class V, 100kHz & 1MHz-100A/m
Auxiliary power supply performance	IEC 60255-26:2013
- Voltage dips	Up to 200ms for dips to 40% of rated voltage without reset
-Voltage short interruptions	100ms for Interruption without rebooting

#### 2.6 Certifications

ISO9001:2015

ISO14001:2015

ISO45001:2018

• ISO/IEC27001:2013

CMMI L5

• EMC: 2014/30/EU, EN60255-26:2013

Products safety (LVD): 2014/35/EU, EN60255-27:2014

#### 2.7 Terminals

Connection Type	Wire Size	Screw Type	Torque
AC current	Screw terminals, 2.5mm² lead	M3	0.6~1.3N·m
AC voltage	Screw terminals, 1.5mm² lead	МЗ	0.6~1.3N·m
Power supply	Screw terminals, 1.0mm <sup>2</sup> ~2.5mm <sup>2</sup> lead	M2.5	0.3-0.6N·m
Contact I/O	Screw terminals, 1.0mm²-2.5mm² lead	M2.5	0.3~0.6N·m
Grounding (Earthing) Connection	BVR type, 2.5mm²~6.0mm² lead	M4	1.6~1.8N·m

# 2.8 Measurement Scope and Accuracy

Item	Range	Accuracy	
Phase range	0° ~ 360°	≤±3°	
Frequency	fn±3 Hz	≤ 0,02Hz	
Currents from protection measurement current transformers			
Company	0.05, 5.0015	≤ 2.0% of rating (0.05~1.00In)	
Current	0.05~5.00ln	≤ 2.0% of applied quantities (1.00~5.00in)	
\	0.05 4.5011-	≤ 1.0% of rating (0.05~1.00Un)	
Voltage	0.05~1.50Un	≤ 1.0% of applied quantitles (1.00~1.50Un)	
	0.05~1,50Un	≤ 3.0% of rating (0.05~1.00In, 0.05~1.00Un)	
Active power (W)	0.05~5.00ln	≤ 3.0% of applied quantities (1.00~5.00in, 1.00~1.50Un)	
D	0.05~1.50Un	≤ 3.0% of rating (0.05~1.00In, 0.05~1.00Un)	
Reactive power (VAr)	0.05~5.00ln	≤ 3,0% of applied quantities (1.00~5.00ln, 1.00~1.50Un)	
A	0.05~1.50Un	≤ 3.0% of rating (0.05~1.00ln, 0.05~1.00Un)	
Apparent power (VA)	0.05~5.00ln	≤ 3.0% of applied quantities (1.00~5.00in, 1.00~1.50Un)	
F A16->	0.05~1.50Un	≤ 3.0% of rating (0.05~1.00In, 0.05~1.00Un)	
Energy (Wh)	0.05~5.00ln	≤ 3.0% of applied quantities (1.00-5.00In, 1.00-1.50Un)	



15	0.05~1.50Un	≤ 3.0% of rating (0.05~1,00In, 0.05~1.00Un)
Energy (VAh)	0.05~5.00ln	≤ 3.0% of applied quantities (1.00~5.00in, 1.00~1.50Un)

# 2.9 Management Function

#### 2.9.1 Control Performance

Control mode	Local or remote
Accuracy of local control	≤ 1s
Accuracy of remote control	≤ 3\$

#### 2.9.2 Clock Performance

Real time clock accuracy	≤ 3s/day
Accuracy of GPS synchronization	≤ 1ms
External time synchronization	IRIG-B (200-98), PPS, IEEE1588 or SNTP protocol

#### 2.9.3 Fault and Disturbance Recording

Maximum duration	10000 sampled points (24 sampled points per cycle)
Recording position	10 cycles before pickup of trigger element

#### 2.9.4 Binary Input Signal

Resolution of binary input signal	≤1ms
Binary input mode	Potential-free contact

#### 2.10 Protective Functions

#### 2.10.1 Fault Detector

#### 2.10.1.1 DPFC Current Element

Setting range	0.050ln~30.000ln (A)
Accuracy	≤2.5% of setting or 0.02In, whichever is greater

#### 2.10.1.2 Residual Current Element

Setting range	0.050in~30.000in (A)
Accuracy	≤2.5% of setting or 0.02In, whichever is greater

#### 2.10.1.3 Overvoltage Element

1	Setting range	Un~2Unn (V)	
	Accuracy	≤2.5% of setting or 0.01Un, whichever is greater	ĺ

#### 2.10.2 Distance Protection

Setting range	(0.000~4Unn)/ln (ohm)
Accuracy	≤2.5% of setting or 0.1Ω/In, whichever is greater
Resetting ratio	105%

Date: 2019-03-01

PCS-902 Line Distance Relay



Time delay	0.000~10.000 (s)
Accuracy	≤1%×Setting+30ms

# 2.10.3 Phase Overcurrent Protection

Setting range	0.050in~30.000in (A)
Accuracy	\$2.5% of setting or 0.02In, whichever is greater
Resetting ratio	97%
Time delay	0.000-20.000 (s)
Accuracy (definite-time characteristic)	≤1%×Setting+30ms (at 2 times current setting)
Accuracy (inverse-time characteristic)	≤5% of operating time or 30ms, whichever is greater
	(for current between 1.2 and 20 multiples of pickup)

#### 2.10.4 Earth Fault Protection

Setting range	0.050in~30.000in (A)
Accuracy	≤2.5% of setting or 0.02In, whichever is greater
Resetting ratio	97%
Time delay	0.000~20.000 (s)
Accuracy (definite-time characteristic)	≤1%×Setting+30ms (at 2 times current setting)
Accuracy (inverse-time characteristic)	≤5% of operating time or 30ms, whichever is greater
	(for current between 1.2 and 20 multiples of pickup)

# 2.10.5 Negative-sequence Overcurrent Protection

Setting range	0.050ln~30.000ln (A)
Accuracy	≤2.5% of setting or 0.02In, whichever is greater
Resetting ratio	97%
Time delay	0.000-20.000 (s)
Accuracy (definite-time characteristic)	≤1%×Setting+30ms (at 2 times current setting)
Accuracy (inverse-time characteristic)	\$2.5% of operating time or 30ms, whichever is greater
	(for current between 1.2 and 20 multiples of pickup)

# 2.10.6 Overvoltage Protection

Setting range	Un~2Unn (V)
Accuracy	≤2.5% of setting or 0.01Un, whichever is greater
Resetting ratio	98%
Time delay	0.000~30.000 (s)
Accuracy (definite-time characteristic)	≤1%×Setting+30ms (at 1.2 times voltage setting)
Accuracy (inverse-time characteristic)	\$2.5% of operating time or 30ms, whichever is greater (for voltage between 1.2 and 2 multiples of pickup)

# 2.10.7 Negative-sequence Overvoltage Protection

Setting range	0-Un (V)
Accuracy	≤2.5% of setting or 0.01Un, whichever is greater
Resetting ratio	95%

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Time delay	0.000-30.000 (s)
	≤1%×Setting+30ms (at 1.2 times voltage setting)

# 2.10.8 Residual Overvoltage Protection

Setting range	0–2Unn (V)
Accuracy	≤2.5% of setting or 0.1V, whichever is greater
Resetting ratio	95%
Time delay	0.000~3600.000 (s)
Accuracy (definite-time characteristic)	≤1%×Setting+30ms (at 1.2 times voltage setting)
	≤2.5% of operating time or 30ms, whichever is greater
Accuracy (inverse-time characteristic)	(for residual voltage between 1.2 and 2 multiples of
	pickup)

#### 2.10.9 Undervoltage Protection

Setting range	0~Unn (V)
Accuracy	≤2.5% of setting or 0.01Un, whichever is greater
Resetting ratio	102%
Time delay	0.000~30.000 (s)
Accuracy (definite-time characteristic)	≤1%×Setting+30ms (at 0.8 times voltage setting)
Accuracy (inverse-time characteristic)	≤2.5% of operating time or 30ms, whichever is greater
	(for voltage between 0.5 and 0.8 multiples of pickup)

# 2.10.10 Overfrequency Protection

Setting range	50.00~65.00 (Hz)
Accuracy	≤ 0.02Hz
Resetting value	Setting-0.05Hz
Time delay	0.000~100.000 (s)
Accuracy	≤1%×Setting+30ms (at 1.2 times frequency setting)

#### 2.10.11 Underfrequency Protection

Setting range	45.00~60.00 (Hz)
Accuracy	≤ 0.02Hz
Resetting value	Setting+0.05Hz
Time delay	0.000-100,000 (s)
Accuracy	≤1%×Setting+30ms (at 0.8 times frequency setting
df/dt blocking setting range	0.200~20.000 (Hz/s)
Accuracy	≤ 0.02Hz/s

# 2.10.12 Breaker Failure Protection

Pick-up time	<25ms
Drop-off time	<20ms
Setting range of phase current	0.050in~30.000in (A)
Setting range of zero-sequence current	0.050ln~30.000ln (A)

PCS-902 Line Distance Relay
Date: 2019-03-01



Setting range of negative-sequence current	0.050in~30.000in (A)		
Accuracy	≤2.5% of setting or 0.02In, whichever is greater		
Time delay (first)	0.000~10.000 (s)		
Time delay (second)	0.000~10.000 (s)		

#### 2.10.13 Thermal Overload Protection

Base current setting range	0.050in-30.000in (A)	
Accuracy	≤2.5% of setting or 0.02ln, whichever is greater	
Line thermal time constant	0.100~100.000 (min)	
Thermal overload coefficient for trip	1.000~3.000	
Thermal overload coefficient for alarm	1.000~3.000	
Resetting ratio	95%	
Drop-off time	<30ms	
Toronogram	≤2.5% of operating time or 30ms, whichever is greater	
Time accuracy	(for current between 1.2 and 20 multiples of pickup)	

#### 2.10.14 Stub Differential Protection

Setting range	0.050ln~30.000ln (A)
Accuracy	≤2.5% of setting or 0.02In, whichever is greater
Resetting ratio	95%
Time delay	0.000~10.000 (s)
Accuracy	≤1%×Setting+30ms (at 2 times current setting)

#### 2.10.15 Dead Zone Protection

Setting range	0.050in~30.000in
Accuracy	≤2.5% of setting or 0.02ln, whichever is greater
Resetting ratio	95%
Time delay	0.000~10.000s
Accuracy	≤1%×Setting+30ms

#### 2.10.16 Pole Discrepancy Protection

Setting range (zero-sequence current)	0.050In~30.000In (A)	
Setting range (negative-sequence current)	0.050in~30.000in (A)	
Accuracy ≤2.5% of setting or 0.02in, whichever is greater		
Resetting ratio	95%	
Time delay 0.000~600.000 (s)		
Accuracy ≤1%×Setting+30ms (at 2 times current setting)		

# 2.10.17 Broken Conductor Protection

Setting range (I2/I1)	0.20~1.00
Accuracy	≤2.5% of setting
Resetting ratio	95%
Time delay	0.000-600.000 (s)

PCS-902 Line Distance Relay

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<del></del>	 	
Accuracy	≤1%×Setting+30ms	
L	 	

#### 2.10.18 Reverse Power Protection

Setting range	0.100in~50.000in	
Accuracy	≤2% of setting or 0.5W, whichever is greater	
Resetting ratio	95%	
Time delay	0.010~300.000 (s)	
Accuracy	≤1%×Setting+30ms	

#### 2.10.19 Auto-reclosing

Phase difference setting range	0~89 (Deg)		
Accuracy	2.0Deg		
Voltage difference setting range	0.02Un~0.8Un (V)		
Accuracy	Max(0.01Un, 2.5%)		
Frequency difference setting range	0.02~1 (Hz)		
Accuracy	0.01Hz		
Operating time of synchronism check	≤1%×Setting+20ms		
Operating time of energizing check	≤1%×Setting+20ms		
Operating time of auto-reclosing	≤1%×Setting+20ms		

# 2.10.20 Transient Overreach

Tolerance for all high-speed protection	≤2%

#### 2.10.21 Fault Locator

Accuracy for multi-phase faults with single end feed	< ±2.5%
Tolerance will be higher in case of single-phase fault with	h high ground resistance.



#### 6.1 Overview

PCS-902 adopts 32-bit microchip processor CPU produced by FREESCALE as control core for management and monitoring function, meanwhile, adopts high-speed digital signal processor DSP for all the protection calculation. 24 points are sampled in every cycle and parallel processing of sampled data can be realized in each sampling interval to ensure ultrahigh reliability and safety of the device.

PCS-902 is comprised of intelligent plug-in modules, except that few particular plug-in modules' position cannot be changed in the whole device (gray plug-in modules as shown in *Figure 6.1-1*), other plug-in modules like AI (analog input) and IO (binary input and binary output) can be flexibly configured in the remaining slot positions.

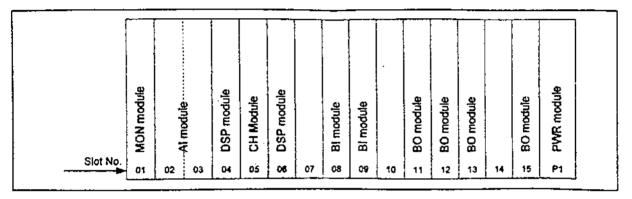


Figure 6.1-1 Rear view of fixed module position

PCS-902 has 16 slots, PWR plug-in module, MON plug-in module, DSP plug-in module and CH plug-in module are assigned at fixed slots.

Besides 5 fixed modules are shown in above figure, there are 12 slots can be flexibly configured. At plug-in module, BI plug-in module and BO plug-in module can be configured at position between slot 02, 03 and 06~15. It should be pay attention that AI plug-in module will occupy two slots.

This device is developed on the basis of our latest software and hardware platform, and the new platform major characteristics are of high reliability, networking and great capability in anti-interference. See *Figure 6.1-2* for hardware diagram.



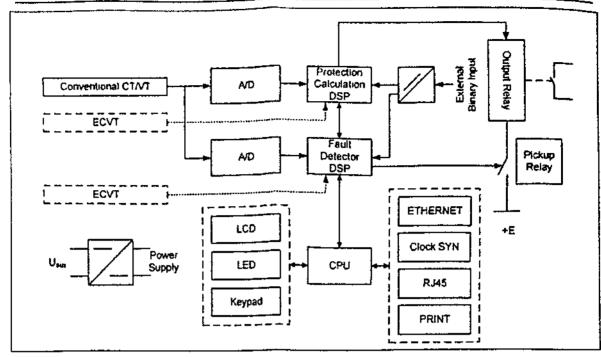


Figure 6.1-2 Hardware diagram

The working process of the device is as shown in above figure: current and voltage from conventional CT/VT are converted into small voltage signal and sent to DSP module after filtered and A/D conversion for protection calculation and fault detector respectively (ECVT signal is sent to the device without small signal and A/D conversion). When DSP module completes all the protection calculation, the result will be recorded in 32-bit CPU on MON module. DSP module carries out fault detector, protection logic calculation, tripping output, and MON module performs SOE (sequence of event) record, waveform recording, printing, communication between the device and SAS and communication between HMI and CPU. When fault detector detects a fault and picks up, positive power supply for output relay is provided.

The items can be flexibly configured depending on the situations like sampling method of the device (conventional CT/VT or ECT/EVT), and the mode of binary output (conventional binary output or GOOSE binary output). The configurations for PCS-900 series based on microcomputer are classified into standard and optional modules.

Module ID	Module description	Remark
NR1101/NR1102	Management and monitor module (MON module)	standard
NR1401/NR1408	Analog input module (Al module)	standard
NR1161	Protection calculation and fault detector module (DSP module)	standard
NR1213/NR1214	Protection communication channel module (CH module)	option
NR1503/NR1504/NR1508	Binary input module (Bi module)	standard
NR1521/NR1580	Binary output module (BO module)	standard
NR1301	Power supply module (PWR module)	standard

Table 6.1-1 PCS-902 module configuration

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Module ID	Module description	Remark	
NR1136	GOOSE and SV from merging unit by IEC61850-9-2 (NET-DSP module)	option	
	Human machine interface module (HMI module)	standard	

- MON module provides functions like communication with SAS, event record, setting management etc.
- Al module converts AC current and voltage from current transformers and voltage transformers respectively to small voltage signal.
- DSP module performs filtering, sampling, protection calculation and fault detector calculation.
- CH module performs information exchange with the remote device through a dedicated optical fibre channel, multiplex optical fibre channel or PLC channel.
- BI module provides binary inputs via opto-couplers with rating voltage among 24V/110V/125V/220V/250V (configurable).
- BO module provides output contacts for tripping, and signal output contact for annunciation signal, remote signal, fault and disturbance signal, operation abnormal signal etc.
- PWR module converts DC 250/220/125/110V into various DC voltage levels for modules of the device.
- NET-DSP module receives and sends GOOSE messages, sampled values (SV) from merging unit by IEC61850-9-2 protocol.
- HMI module is comprised of LCD, keypad, LED indicators and multiplex RJ45 ports for user as human-machine interface.

PCS-902 is made of a 4U height 19" chassis for flush mounting. Components mounted on its front include a 320×240 dot matrix LCD, a 9 button keypad, 20 LED indicators and a multiplex RJ45 port. A monolithic micro controller is installed in the equipment for these functions.

Following figures show front and rear views of PCS-902 respectively.

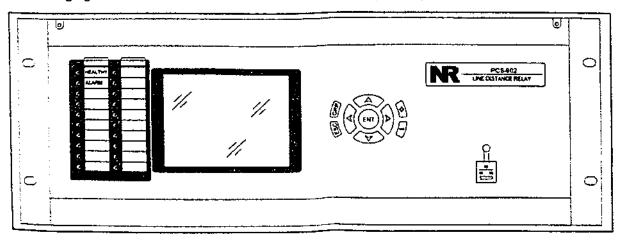


Figure 6.1-3 Front view of PCS-902



others are configurable. 20 LED indicators are, from top to bottom, operation (HEALTHY), self-supervision (ALARM),

For the 9-button keypad, "ENT" is "enter", "GRP" is "group number" and "ESC" is "escape"

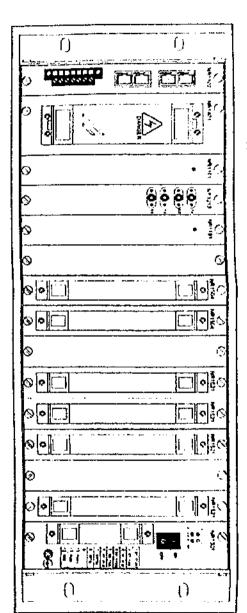


Figure 6.1-4 Typical rear view of PCS-902

# 6.2 Typical Wiring

# 6.2.1 Conventional CT/VT (For reference only)

Sign aro.	2	
9	MON module	NR1162
02 03	··· Al module ······	NR1401
5	DSP module	NR1181
S	CH Module	NR1161 WR1213 NR916
8	DSP module	NR3161
8		
08	8I module	NR 1504
g		
ō		
=	BO module	NR1521A
12	BO module	NR1521A NR1521C NR1521C
13	BO module	NR1521C
=		
5.	BO module	NR1521F NR1301
2	PWR module	NR 1301

The following typical wiring is given based on above hardware configuration



# 2 Technical Data

# 2.1 Electrical Specifications

#### 2.1.1 Power Supply

Rated Voltage	110Vdc, 125Vdc, 220Vdc	, 250Vdc
Variation	(80%-120%)Un	
Ripple in the DC auxiliary voltage	Max 15% of the DC value	, Per IEC 60255-11:1979
Voltage dips and voltage short interruptions	Per IEC 60255-11:1979 20ms for interruption with to 100ms	out de-energizing, dips 60% of Un without reset up
Burden	Quiescent condition	< 15W
Delogi	Operating condition	< 25W

#### 2.1.2 Binary input

Rated Voltage	110Vdc 77.0Vdc	125Vdc 87.5Vdc	220Vdc	250Vdc
Maximum permitted voltage	150Vdc	150Vdc	300Vdc	300Vdc
Withstend	2kVac			

#### 2.1.3 Binary Output

Output mode	Potential free contact	
Rated Voltage	250Vac/dc	
Test voltage across open contact	> 1000Vac rms	
Continuous carry	8A	
Short duration current (200ms)	50A	
Pickup time	< 10ms	
Dropout time	< 10ms	
Bounce time	< 1ms	
Breaking capacity at 250Vdc	0.4A resistance 0.25A inductive (L/R≃40ms)	
Durability		
Loaded contact	100,000 operations minimum	
Unloaded contact	10,000,000 operations minimum	



# 2.2 Mechanical Specifications

Mounting Way	Flush mounted
Weight per device	Approx. 25kg
Housing material	Aluminum
Housing color	Silver grey
Location of terminal	Rear panel of the device
Protection class: Per IEC6052	9:1989
Front side	IP40, Up to IP51(Flush mounted)
Other sides	IP30
Rear side, connection terminals	IP20

# 2.3 Ambient Temperature and Humidity Range

Standard	IEC 60255-6:1988	
Operating temperature	-25°C~+60°C	
Transport and storage temperature range	-40°C-+70°C	
Permissible humidity	5%~95%, condensation not permissible	

# 2.4 Type Tests

#### 2.4.1 Environmental Tests

Dry cold test	IEC60068-2-1:2007
Dry heat test	IEC60068-2-2:2007
Damp heat test, cyclic	IEC60068-2-30:2005

#### 2.4.2 Mechanical Tests

Vibration	IEC 60255-21-1:1988 Class I
Shock and bump	IEC 60255-21-2:1988 Class I

#### 2.4.3 Electrical Tests

Insulation resistance measurements	Isolation resistance >100MΩ@500VDC
Overvoltage category	ПІ
Impulse voltage tests	Test voltage 5kV
Dielectric tests	Test voltage 2kV, 50Hz, 1min
Standard	IEC 60255-27:2013

#### 2.4.4 Electromagnetic Compatibility

1	· · · · · · · · · · · · · · · · · · ·	<del></del>
	1MHz burst disturbance test	IEC 60255-26-2013
		<u></u>



	Common mode: class III 2.5kV
	Differential mode: class IiI 1.0kV
	IEC 60255-26-2013 class IV
Electrostatic discharge test	For contact discharge: 8kV
	For air discharge: 15kV
	IEC 60255-26-2013 class III
	Frequency sweep
	Radiated amplitude-modulated
Marke francisco interference	10V/m (rms), f=80~1000MHz
Radio frequency interference	Spot frequency
tests	Radiated amplitude-modulated
	10V/m (rms), f=80MHz/160MHz/450MHz/900MHz
	Radiated pulse-modulated
	10V/m (ms), f=900MHz
<del></del>	IEC 60255-26-2013
Fest transient disturbance tests	Power supply, I/O, Earth: class IV, 4kV, 2.5kHz, 5/50ns
	Communication terminals: class IV, 2kV, 5kHz, 5/50ns
	IEC 60255-26-2013
	Power supply, AC input, I/O port: class TV, 1.2/50us
Surge immunity test	Common mode: 4kV
	Differential mode: 2kV
	IEC 60255-26-2013
Conducted RF Electromagnetic	Power supply, AC, I/O, Comm. Terminal: Class III., 10Vrms, 150
Disturbance	kHz-80MHz
Power Frequency Magnetic	IEC 61000-4-8:2001
Field Immunity	class V, 100A/m for 1min, 1000A/m for 3s
	IEC 61000-4-9:2001
Pulse Magnetic Field Immunity	class V, 6.4/16µs, 1000A/m for 3s
Damped oscillatory magnetic	IEC 51000-4-10:2001
field immunity	class V, 100kHz & 1MHz-100A/m
Auxiliary power supply	IEC 60255-26-2013
performance	Up to 200ms for dips to 40% of rated voltage without reset
- Voltage dips -Voltage short interruptions	100ms for interruption without rebooting
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# 2.5 Certifications

- ISO9001:2008
- ISO14001:2004
- OHSAS18001:2007
- ISO10012:2003



- CMMI L5
- EMC: 2004/108/EC, EN50263:1999
- Products safety(PS): 2006/95/EC, EN61010-1:2001



#### 4 Hardware

CJX-02 has 14 slots, and it is assembled by different modules into an integral panel. Figure 4-1 shows the front view of CJX-02.

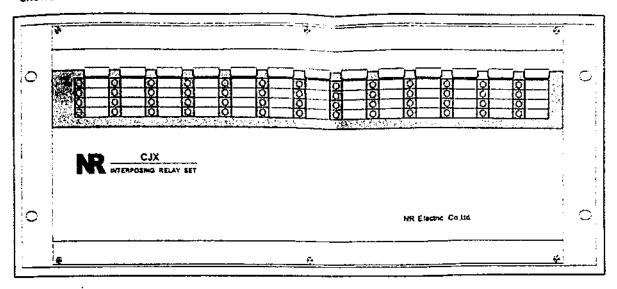


Figure 4-1 Front view of CJX-02

In repeat relay plug-in module, there are two LED indicators, "L1" and "L2", which are red and are used to indicate current state of the repeat relay plug-in module. When the first group of relays of repeat relay plug-in module operates, "L1" is on, and when the second group of relays of repeat relay plug-in module operates, "L2" is on.

In LOCKOUT plug-in module, there is one LED indicator "LOCKOUT", which is red and is used to indicate current state of lockout relay.

When the slot is not inserted by plug-in module, the corresponding LED indicator on panel is blank. Other blank module slots can adopt plug-in modules without LED indicator on demand.

#### 5.5 Installing the Protective Device

#### 5.5.1 Overview

The mechanical and electrical environmental conditions at the installation site must be within permissible range according to the technical data of the protection equipment. Dusty, damp places, places liable to rapid temperature variations, powerful vibrations and shocks, surge voltages of high amplitude and fast rise time, strong induced magnetic fields or similar extreme conditions should be avoided. Please refer to Chapter 2 for details.

Sufficient space must be available in front of and at rear of the protection panel to allow access for maintenance and future modifications. Flush mounted protection equipment should be mounted so that equipment modules can be added and replaced without excessive demounting.

#### 5.5.2 Dimensions

The equipment adopts IEC standard chassis and is rack with modular structure. It uses an integral faceplate and plug terminal block on backboard for external connections. CJX series device is IEC 4U high and 19" wide. Figure 5.5-1 shows its dimensions and Figure 5.5-2 shows the panel cut-out.