



Republic of the Philippines  
**DEPARTMENT OF SCIENCE AND TECHNOLOGY**  
**ADVANCED SCIENCE AND TECHNOLOGY INSTITUTE**



**PURCHASE ORDER**

ASTI-FM 03-17  
 REV 3 / 10 October 2023

<b>Supplier:</b>	<b>APDS AUTOMATION AND POWER DISTRIBUTION SERVICES</b>	<b>PO No.:</b>	<b>24-08-189</b>
<b>Address:</b>	<b>No. 8 Sardonyx St., Rosabel Subd., Brgy. Banaba, San Mateo, Rizal</b>	<b>PO Date:</b>	<b>August 29, 2024</b>
<b>TIN:</b>	<b>124-469-490-000</b>	<b>Mode of Procurement:</b>	<b>Competitive Bidding</b>

Gentleman:

Please furnish this Office the following articles subject to the terms and conditions contained herein:

<b>Place of Delivery:</b>	<b>ASTI Bldg., C.P. Garcia Ave., U.P. Technology Park Complex, U.P. Campus, Diliman, Quezon City 1101</b>	<b>Delivery Term:</b>	<b>Sixty (60) calendar days upon issuance of NTP</b>
<b>Date of Delivery:</b>	_____	<b>Payment Term:</b>	<b>Government Terms</b>
		<b>Warranty Term:</b>	_____

Stock / Property No.	Unit	Description	Quantity	Unit Cost	Amount
1	Lot	<p><b>Bypass Isolation Transfer Switch for Generator Sets</b></p> <p>1. BACKGROUND AND OBJECTIVES</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Replacement, Dismantling, Installation and Testing of Bypass Isolation Transfer Switch for the utilization of the 250kVA and 350kVA Generator Sets as dedicated emergency backup power of ASTI inclusive of labor, materials, and technical expertise to integrate the existing Generator Sets to the building normal power supply using Transfer Switch.</p> <p>2. APPROVED BUDGET FOR THE CONTRACT</p> <p>2.1. The total amount for this procurement is Three Million Two Hundred Eighty-Eight Thousand Pesos (₱3,288,000.00), inclusive of all government taxes and other charges.</p> <p>3. SCOPE OF WORKS</p> <p>3.1. Supply and delivery of new transfer switch shall be done during office hours, unless instructed by the end user at ASTI, Diliman, Quezon City for inspection of ASTI personnel/representative.</p> <p>3.2. Dismantling of the old Automatic Transfer Switch (ATS) and temporary dismantling of existing cables and wirings of the old ATS.</p> <p>3.3. Mounting and installation of transfer switch and all its components including the control wires to operate the dedicated emergency backup power supply using the existing ASTI generator sets.</p> <p>3.3.1. The supplied Transfer Switch shall guarantee the automatic changeover from normal to emergency power if the normal power supply</p>	1	₱3,288,000.00	₱3,288,000.00

**Postal Address :** ASTI Bldg., U.P. Technology Park Complex, CP Garcia Ave., Diliman, Quezon City 1101  
**Website :** www.asti.dost.gov.ph  
**Email :** info@asti.dost.gov.ph

**Tel No. :** +632 8249-8500  
 +632 8426-9755

fails and automatic changeover from emergency to normal power if the normal power supply returns.

3.3.2. Mechanical interlock to ensure two (2) power sources cannot be switched on at the same time.

3.4. Delivery, mounting, installation and tapping of power and control lines to the brand-new transfer switch (commercial power as main and generator set as backup). Existing power cables shall be used.

3.5. Configuration of transfer switch settings in the presence of ASTI personnel/representative.

3.6. Testing and commissioning through blackout simulation and test run the generator set using transfer switch features in the presence of ASTI personnel/representative.

3.7. Apply proper sealant on every penetration to be made during the construction, like fire sealant, water proofing for perimeter walls.

3.8. Conduct on-site orientation/hands-on training for the ASTI personnel/representative related to the operation and maintenance of the brand-new transfer switch.

3.9. In the case that the contractor should request for electrical power shutdown for any activity to commence, the contractor shall secure a permit or notice from ASTI ahead of time and shall not exceed the maximum allowable downtime for any offices functioning 24/7.

3.10. The service provider shall submit methodology and Gantt chart for the proposed activities upon awarding of the project.

3.11. The service provider shall submit all materials to be used on the project and is subject to approval.

3.12. The service provider shall submit an "as-built" electrical plan and AutoCAD file and all test results upon completion of all the activities.

3.13. Downtime procedure

3.13.1. Supplier shall include wire connecting ASTI Generator Sets and ASTI Network Operation Center (NOC). The Generator Set shall supply power to the ASTI NOC to minimize downtime during actual replacement of transfer switch. Supplier can opt to provide a mobile generator to keep the critical load running.

3.13.2. Supplier shall perform site inspection before the installation of the transfer switch to verify the actual condition and the wire needed to connect ASTI generator set and ASTI NOC.

3.14. Up to Ten (10) minutes downtime to transfer power of critical loads. Temporary power supply to critical loads shall be provided by the contractor to ensure minimal interruption.

3.15. Transfer of cables for the connection of the load side of transfer switch shall be performed preferably after office hours as it would cause temporary power interruption.

3.16. Enclosure:

3.16.1. The dimension of the enclosure shall fit on the Generator Room.

3.16.2. Contractor must remove the non-operational manual ATS enclosure.

3.16.3. Contractor must relocate the PCB enclosure of the circuit breaker that will be affected with the installation of the new enclosure.

3.16.4. Contractor must remove the metal gate going to the ATS.

3.16.5. Contractor must consult the end-user with any removal / relocation of any equipment that

may impede the installation of the new enclosure.

#### 4. TECHNICAL SPECIFICATIONS

##### 4.1. Bypass Isolation Transfer Switch (Rated 1600A)

###### 4.1.1. Automatic Transfer Switch

4.1.1.1. No. of Phase: 3-phase

4.1.1.2. No. of Pole: 3-poles

4.1.1.3. Voltage: 220-240V

4.1.1.4. Current: 1600A, 1600AT/1600AF

4.1.1.5. Circuit Breaker:

4.1.1.5.1. In rated current up to 50 degrees Celsius: 1600A calibrated at 45 degrees Celsius

4.1.1.5.2. Rated Operational Voltage: 690V AC 50/60 Hz

4.1.1.5.3. Network Type: AC

4.1.1.5.4. Network Frequency: 50/60 Hz

###### 4.1.2. Manual Transfer Switch

4.1.2.1. No. of Phase: 3-phase

4.1.2.2. No. of Pole: 3-poles

4.1.2.3. Voltage: 220-240V

4.1.2.4. Current: 1600A, 1600AT/1600AF

4.1.2.5. Circuit Breaker:

4.1.2.5.1. In rated current up to 50 degrees Celsius: 1600A calibrated at 45 degrees Celsius

4.1.2.5.2. Rated Operational Voltage: 690V AC 50/60 Hz

4.1.2.5.3. Network Type: AC

4.1.2.5.4. Network Frequency: 50/60 Hz

###### 4.1.3. Bypass Protection / Switch

4.1.3.1. No. of Phase: 3-phase

4.1.3.2. No. of Pole: 3-poles

4.1.3.3. Voltage: 220-240V

4.1.3.4. Current: 1600A

###### 4.1.4. Intelligence Control

4.1.4.1. Time delay normal to emergency and time delay emergency to normal (Retransfer)

4.1.4.2. ATS should initiate retransfer to the normal source after sensing restoration of acceptable power.

4.1.4.3. Normal and emergency control relays

4.1.4.4. Normal and emergency control circuit breaker protection

4.1.4.5. Indicator lamp (red and green) to indicate status or operation of the system

4.1.4.6. Push button switches for manual operation of switching mechanism

4.1.4.7. Selector switch (Auto-Manual)

4.1.4.8. Selector switch (Normal-Test)

4.1.4.9. With Timer Delay Engine Cool-off (TDEC)

4.1.4.10. With Time Delay Engine Starting (TDES)

4.1.4.11. Shall include over/under voltage protection with anti-single phasing

4.1.4.11.1. VSR – Voltage relay for under voltage, loss of phase, reverse phase sequence, over and under frequency function.

###### 4.1.5. Enclosure:

4.1.5.1. Follows National Electrical Manufacturer Association (NEMA) standard

4.1.5.2. Powder Coated Enclosure

4.1.5.3. With digital panel meter to show important electrical parameter values (i.e. Voltage

and Current)

4.1.5.4. With electrical diagram attached to the enclosure for the technician reference

4.1.5.5. With provided grounding terminal

4.1.5.6. ATS with Manual Transfer Switch (MTS) capability

4.2. Existing Site Condition and Retrofitting Works

4.2.1. The existing ATS and MTS shall be removed and surrendered to ASTI, and the existing cables and raceway shall be reused and retrofitted for the new system.

4.3. Bypass switch should be designed so that power to the load is not interrupted in any normal bypass operation. Consequently, bypass functions can be performed at any time, without danger of disrupting power to critical loads.

4.4. The scope of this project shall conform to the requirements of:

4.4.1. Philippine Electrical Code

4.4.2. International Standards Organization ISO 9001

4.5. Additional Requirements

4.5.1. The Contractor must provide a colored brochure/catalogue (In English language) of the major components to be supplied.

4.5.2. The Contractor must provide an initial schematic diagram and methodology of works during bid submission for the proposed layout by the Contractor to allow ASTI to check and study the proposed system.

4.5.3. The Contractor must have an ISO Certification for ISO 9001 to ensure quality management on project requirement, as specified in item 4.4.2.

## 5. SUBMITTALS

5.1. Complete connection, schematic diagram, layouts, and riser diagrams for the electrical systems

5.1.1. All drawings should be signed and dry sealed by Registered Professional Electrical Engineer

5.1.2. All drawings, submittals, etc. shall be submitted sufficiently in advance of field requirements to allow ample time for checking and no extension of the contract time will be granted to the Contractor, by reason of failure in this respect.

5.2. Manufacturer's catalog sheets with complete technical data, marked as necessary to indicate

5.3. Field test reports including but not limited to the following:

5.3.1. Blackout simulation

5.3.2. Voltage level test

5.3.3. Phase relationship

5.4. List of miscellaneous materials proposed, including conduits, conductors, insulators, and manhole accessories, identifying manufacturer and type.

5.5. All submittals shall be complete and shall contain all required and detailed information.

## 6. PROJECT CONDITIONS

6.1. Site Access: The contractor shall provide a list of service personnel and tools needed for the project. Any personnel not listed shall not gain access to the site.

6.2. Occupied Premises: Take necessary

precautions to ensure the safety and comfort of the occupants throughout the project.

6.3. Weather Considerations: Prepare for potential weather-related delays and take appropriate measures to protect materials from adverse weather conditions.

#### 7. WARRANTY

7.1. From the commencement of installation up to final acceptance, the contractor shall assume full responsibility for the following:

7.1.1. Any damage or destruction of the works except those occasioned by force majeure; and

7.1.2. Safety, protection, security, and convenience of his personnel, third parties, and the public at large, as well as the works, equipment, installation and the like to be affected by his construction work.

7.2. The transfer switch must carry a one (1) year warranty for parts, excluding consumable items, and a one (1) year warranty for works/repair/overhaul. The Warranty Certificate shall commence from the date of end-user acceptance. Any parts found to be defective, or any deficiency incurred within the specified warranty period shall be repaired or replaced by the winning bidder free of charge and without any cost to ASTI.

#### 8. DELIVERY TERMS

8.1. The transfer switch including all items and its accessories must be delivered within sixty (60) calendar days upon issuance of the Notice to Proceed.

8.2. After Sales service and support during the warranty period, all reported defects shall be completely/satisfactorily repaired/replaced by the winning bidder/supplier within seventy-two (72) hours after receipt of a verbal and/or written notice from the Procuring Entity.

#### 9. PAYMENT TERMS

9.1. Payment shall be made only upon certification/acceptance by the end-user that the Goods and/or Services are rendered or delivered in accordance with the terms of this Contract and are duly inspected and accepted. No payment shall be made for services not yet rendered or for supplies and materials not yet delivered under this Contract.

#### 10. LIQUIDATED DAMAGES

10.1. Failure to comply with the terms and conditions of the contract will result in the payment of corresponding penalties/liquidated damages in the amount to 1/10 of 1% of the cost of the unperformed portion for every day delay. Once the cumulative number of liquidated damages reaches 10% of the amount of the contract, ASTI shall rescind the contract, without prejudice to other courses of action and remedies open to it.

(Please see attached offer.)

**TOTAL:**

**P3,288,000.00**

(Total Amount in Words)

Three Million Two Hundred Eighty-Eight  
Thousand Pesos Only

The contract price is inclusive of taxes and other fees or charges. In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered item/s. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, DOST-ASTI may rescind or terminate the contract, without prejudice to other courses of action and remedies available under the circumstances and in accordance with the provisions of the latest implementing rules and regulations of RA 9184.

Conforme:

Very Truly Yours,

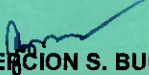
\_\_\_\_\_  
(Signature over Printed Name of Supplier)

  
FRANZ A. DE LEON, Ph.D.

Director, DOST-ASTI

Digitally signed  
by Benjamin R. Lara

\_\_\_\_\_  
(Date)

Fund Cluster:	01	ORS / BURS No.:	061011062029-09-000098
Funds Available:	Php 3,288,000.00	ORS / BURS Date:	SEPTEMBER 02, 2029
		Amount:	₱ 3,288,000.00
 GAY CONCEPCION S. BUGAGAO Accountant III			



29 August 2024

**NOTICE TO PROCEED**  
**PUBLIC BIDDING**

**Mr. VERGEL G. ARANDIA**  
 General Manager  
**APDS AUTOMATION AND POWER DISTRIBUTION SERVICES**  
 No. 8 Sardonyx St., Rosabel Subd.  
 Brgy. Banaba  
 San Mateo, Rizal

Dear Mr. Arandia,

Notice is hereby given to **APDS AUTOMATION AND POWER DISTRIBUTION SERVICES** that work/delivery may proceed for the following procurement details:

Contract Name	: <u>Supply and Delivery of Bypass Isolation Transfer Switch of DOST-ASTI Generator Sets</u>
Purchase Request No.	: <u>GAA-24-06-19387</u>
Purchase / Work Order No.	: <u>24-08-189</u>
Total Contract Price	: <u>₱3,288,000.00</u>
(inclusive of taxes, import duties and all other charges or fees)	
Total Contract Price in Words	: <u>Three Million Two Hundred Eighty-Eight Thousand Pesos</u>


Upon signing receipt of this Notice, you are responsible for performing the services under the terms and conditions of the Agreement/Purchase Order/Work Order and in accordance with the schedule of requirements/delivery schedule.

You are also hereby required to file a Warranty Security for a minimum period of three (3) months, in the case of Expendable Supplies, or a minimum period of one (1) year, in the case of Non-Expendable Supplies, after acceptance by the Procuring Entity of the delivered supplies. It shall be covered by either retention money in an amount equivalent to at least five percent (5%) of every progress payment, or a special bank guarantee equivalent to at least five percent (5%) of the total contract price. The said amounts shall only be released after the lapse of the warranty period or, in the case of Expendable Supplies, after consumption thereof; Provided, however, That the supplies delivered are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

Note that failure to comply with the above requirements and failure to perform the services under the terms and conditions of the Agreement/Purchase Order/Work Order may constitute grounds for its forfeiture.

Please acknowledge receipt and acceptance of this Notice by signing in the space provided below. There are two (2) copies of this document; you may keep one copy and return the other to the Bids and Awards Committee (BAC) Secretariat of the Advanced Science and Technology Institute. Should you have any questions or clarifications, you may reach us at bac-sec@asti.dost.gov.ph.

Respectfully,

  
**FRANZ A. DE LEON, Ph.D.** Digitally signed by Franz A. De Leon, DN: cn=by Bayani Benjamin R. Lazo  
 Director

<b>DATE OF ISSUANCE:</b> <b>04 SEP 2024</b>	<b>RECEIVED BY:</b>  _____ Signature over Printed Name  _____ Date and Time	<b>WARRANTY SECURITY</b>  Type of Warranty Security: _____ Amount of Warranty Security: <b>₱</b> _____ O.R. No.: _____
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Postal Address : ASTI Bldg., U.P. Technology Park Complex,  
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