



Government of India
Department of Space
SATISH DHAWAN SPACE CENTER
Propellant Complex, Rasayani
Raigad District, Maharashtra -410 207
क्रय एवं भंडार विभाग PURCHASE & STORES DIVISION-PCR

संदर्भ/Ref No. SDSC SHAR/PCR PURCHASE/2022000767

दिनांक/Date: 22.11.2022

TENDER NOTICE NO. SDSC SHAR/ HPS/PT/PCR/08/2022-2023

On behalf of President of India, Head Purchase and Stores, PCR,RASAYANI invites on line quotations for the following.

SI No	Ref. No.	Description	Qty.
01.	SDSC SHAR/PCR PURCHASE/PCR/2022000767 New E-Procurement [Public Tender - Two Part]	Supply, Installation, Testing & Commissioning of 22kV/433V, 2MVA Transformer at PCR	03 items

Start for downloading of tender documents : from the date of publication.
Last Date for downloading of tender documents : 22.12.2022 at 14:00 hrs.
Last date/Due Date for submission of bids online : 22.12.2022 at 14:00 hrs.
Due Date for opening of tenders : 23.12.2022 at 14:30 hrs.

Instructions to Tenderers:

Bids shall be submitted on line through EGPS only and No tender fee shall be applicable.

01. For full details/scope of work and terms and conditions etc., please see the enclosed annexures.
02. Interested tenderers can download the e-tender from ISRO e-procurement website ISRO NEW E-PROCUREMENT (www.eproc.isro.gov.in) and submit the offer on line in the e-procurement portal. **Offers sent physically by post/courier/in person will not be considered.**
03. Tender documents are also available on ISRO website www.isro.gov.in ISRO New e-procurement website (www.eproc.isro.gov.in) and SDSC SHAR, Sriharikota website www.shar.gov.in. The same can be downloaded and offer submitted on line in the new e-procurement portal only.
04. Quotations received after the due date/time will not be considered.
05. The tender documents are available for download upto 22.12.2022 at 14:00 hrs. and last date for submission of tenders on line 22.12.2022 at 14:00 hrs. and Tender Opening on 23.12.2022 at 14:30 hrs.
06. Interested vendors can attend the Bid opening sessions to know the details. Presence not mandatory to consider the quote for evaluation.
07. Head, Purchase and Stores, PROPELLANT COMPLEX, RASAYANI reserves the right to accept or reject any/or all the quotations.

DT:22.11.2022

एन्. के. शिन्दे
N K SHINDE
प्रधान क्रय व भंडार
HEAD PURCHASE & STORES
भारत सरकार GOVT OF INDIA
अंतरिक्ष विभाग DEPT. OF SPACE
इसरो : अ. ध. अं. कें. शार
ISRO : S D S C SHAR
नोदक कॉम्प्लेक्स, रसायनी
PROPELLANT COMPLEX, RASAYANI
रसायनी, जि. रायगड
RASAYANI, DIST. RAIGAD-410207


HEAD PURCHASE AND STORES

Annexure-I

SCOPE, TECHNICAL SPECIFICATIONS AND EVALUATION CRITERION FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 22KV/433V, 2MVA TRANSFORMER AT PCR

1. **SITE LOCATION:** Propellant Complex Rasayani (PCR), Rasayani, District-Raigad, MH-410207.
2. **DELIVERY:** Prices shall be quoted on the basis of delivery of transformer & other required material to PCR. Cost of Transportation & Transit Insurance are fully in the scope of supplier and the same shall be included in the cost quoted by the bidder.
3. **GENERAL CONDITIONS:**
 - a. **Site Visit :** Bidder is expected to visit the site before submission of offer.
 - b. Bidder shall sign and stamp each of tender document as a token of his acceptance & submit along with his offer.
 - c. The offer shall be complete in all respects and shall be submitted together with requisite information. Any offer incomplete in any particulars is liable for rejection.
 - d. Till commissioning of equipment, the safe storage and handling of all equipment and other items supplied are in the scope of contractor.
 - e. Contractor should have valid license issued by statutory authority to carry out the work.
 - f. The bidder shall provide all the relevant data / details required for evaluating the bid technical and commercially in the specific formats enclosed with the tender. Apart from this, Bidder is free to add any other relevant information.
 - g. During evaluation, PCR may request Bidder for any clarification on the bid/ additional documents/ information required. Bidder shall submit all clarifications/ additional documents/ information requested in original. If not submitted within the stipulated time PCR has right to reject such bids.
 - h. The complete scope of work is defined in the Tender document. Bidders, who undertake total responsibility for the complete scope of work as defined in the Tender document will only be considered.
 - i. In case Bid does not fully comply with the requirement of Tender document and the bidder stipulates deviations to the clauses of the proposal, which are unacceptable to the PCR, the Bid will be rejected.
 - j. Performance of Bidder on similar nature of works executed shall be taken into consideration before selecting the Bidder for opening his price bid.
 - k. The time schedule for completion is given in the Tender document. Bidder is required to confirm the completion period unconditionally.
 - l. Free electricity and water will be provided by the PCR at one location close to the site for the erection, testing and commissioning works.

4. SCOPE OF WORK

Scope of work includes the following,

- a. Disconnection, Dismantling, Shifting of existing 3.3kV/415V, 2MVA Transformer to PCR Stores. Approximate weight of transformer to be shifted is 5100 KG.
- b. Submission of following drawings upon receipt of Purchase Order for approval of PCR before manufacturing:
 - General arrangement drawings & Name plate Details
 - Foundation drawings
 - Terminal boxes of HT / LT side with details of HT and LT bushings /insulators
 - Marshalling box drawings
- c. Manufacture, Supply, Installation, Testing at factory and at site and Commissioning of 22kV / 433V, 2MVA, Dyn11, ONAN Transformer as per specifications- **1No.**
- d. System Nominal Voltage 22kV, 3 Phase, 50Hz, 26.3kA/1S, Neutral solidly grounded.
- e. Loading / Unloading, Transportation of Transformer & it's components to site location. All guidelines of OEM shall be strictly followed while equipment is being transported.
- f. Removal of existing MS channels by demolition of concrete floor. Supply and Grouting of new channels/rails of suitable size as per the foundation plan of new transformer. Necessary locking arrangement for transformer wheels shall be ensured. Any civil works to be carried out to match existing bus-duct with transformer LV terminal box shall be entirely in contractor's scope.
- g. Extending existing neutral and body earthing to the transformer. Necessary length of earthing strips – Copper strips for Neutral & GI strips body earthing shall be supplied and installed at no extra cost. The contractor shall ensure that the earth strips are properly connected to the respective terminals.
- h. Supply and application of Raychem outdoor type end termination for HV side connections suitable for 22kV 3Cx 300sqmm XLPE cable. Scope includes supply & fixing of Raychem 22kV Boots in Transformer HV Terminal Box as per recommendations of transformer manufacturer. Cable shall be provided by the PCR. Laying of cable thro' existing trench is in contractor's scope.
- i. Existing LV side connections are through Bus-duct. LV Cable box of the new transformer shall match the existing bus duct. If required Contractor shall provide at no extra cost, adaptor bus-duct along with required length of aluminium bus bars of suitable size and other hardware to complete LV side connection to the satisfaction of the purchaser.
- j. Supply, Laying and Termination of 2.5sqmm size control cables required for protection interlocks. Approximate distance between transformer and 22kV Feeder is @50m.
- k. Approval of Electrical Inspector & Statutory clearances including Plan & Final approval.
- l. Charging of Transformer and recording observations as per OEM guidelines.
- m. All necessary instruments, meters, wires etc, tools and plants required for conducting the site tests shall be brought by the contractor.
- n. Providing necessary Technicians, Engineers, unskilled manpower & Material handling equipment for carrying out above works at site shall be the responsibility of the contractor.

- o. Area available for installation of transformer is 6.7x5.6m. It includes area required for movement of persons for supervision & maintenance of transformer.

5. SPECIFICATIONS FOR SUPPLY OF TRANSFORMER

Specifications for supply of transformer are as below,

TABLE-1A : TRANSFORMER SPECIFICATIONS

SrNo	Specifications	Value
1	Voltage ratio	22kV / 433V
2	Capacity	2000 KVA
3	Connections	HV- Delta, LV-Star, Dyn11
4	Installation	Outdoor
5	Winding	Copper Wound, Oil immersed.
6	Cooling	ONAN
7	Insulating Oil	Mineral Oil as per IS-335 latest.
8	Tap Changer	Off- Circuit. +5% to -10% in 6 steps of 2.5%
9	Temp rise in Oil / Winding	Max. 40 /45 °C
10	Radiators	Radiators with Isolating Valves.
11	Radiator material	CRCA Sheet Steel, Thickness -1mm.
12	Applicable Standard	IS-1180 Level-I with latest amendments
13	Pressure & Vacuum withstand capability of Tank & Radiators	As per applicable standards.
14	HV connection	Cable Box suitable for 1 run of 3Cx300sqmm XLPE cable with heat Shrinkable End Termination.
15	LV connection	Terminal Box to suit existing Bus duct
16	Mounting	Floor Mounted

Following Fittings and Accessories shall be provided along with the transformer. Pressure & Vacuum withstand capability of Tank & Radiators of offered transformer shall be as per applicable standards.

TABLE 1B : FITTINGS& ACCESSORIES

SrNo	Fitting/ Accessories	Description
1	Buchholz Relay	Relay with Alarm & Trip Contacts and Air release valves.
2	WTI	WTI with Alarm & Trip Contacts
3	OTI	OTI with Alarm & Trip Contacts
4	Marshalling Box	IP-55 protection box with Terminal Block & Sight glass
5	Oil Level Gauge	Prismatic Oil Level Gauge
6	PRV	Explosion Vent with diaphragm
7	Conservator	Conservator with drain plug.
8	Bottom Valve	Drain cum Bottom Filter Valve
9	Top Valve	Top Filter Valve
10	Radiators	Radiators with Isolating Valves
11	Neutral Bushing	Neutral Bushing for Grounding.
12	Air Release Valve	Valve to facilitate release if air trapped in main tank

13	Breather	Silica Gel Breather
14	Earthing Terminal	Two Earthing Terminals on opposite side of main tank
15	Rollers	Rollers with Locking Pads
16	Name Plate	Stainless Steel Rating & Diagram plate

6. TESTS TO BE CONDUCTED ON TRANSFORMER AT MANUFACTURER'S FACILITY

The following routine tests shall be conducted on the transformer as per Applicable Standards at the manufacturer's facility in the presence of Purchaser's Representative before despatching the transformer to site. The Testing equipment, meters etc shall have valid calibrations on the day of testing.

- a. Measurement of winding resistance
- b. Measurement of Voltage Ratio and check of voltage vector relationship
- c. Measurement of No load losses and no load current
- d. Measurement of Impedance voltage / short circuit impedance
- e. Measurement of Insulation resistance
- f. PI Test
- g. Magnetic balance test
- h. Measurement of Induced over voltage withstand test
- i. Measurement of dissipation factor
- j. Measurement of Insulation system capacitance
- k. Measurement of Separate source voltage withstand test
- l. Pressure test

Results of all tests conducted shall be provided in duplicate.

All type test certificates associated with design of transformer shall be submitted for review.

The tests at factory will be witnessed by our PCR's inspection team (generally consisting of 2 Engineers).

Factory in house test certificate for the transformer along with Batch test certificate for the raw material shall be furnished during inspection.

The contractor shall provide hard copies in duplicate of complete sets of operation and maintenance manuals and test certificates.

7. INSTALLATION, TESTING AND COMMISSIONING

- a. Site inspection: Upon receipt at site, the transformer shall be inspected to ascertain that there is no damage to any of its components and accessories.
- b. After unloading transformer shall be shifted on to the channels/rails grouted at its designated location with utmost care & following standard/ recommended methods.
- c. The transformer shall be integrated with all its accessories/fittings and installed as per the guidelines of manufacturer's installation manual.

- d. All necessary safety precautions during, installation, testing and commissioning of transformer shall be strictly adhered by the contractor.
- e. The installation includes first filling of oil supplied by the manufacturer at no extra cost. The oil shall generally conform to IS: 335-1993 with latest amendments if any.
- f. The installation procedure shall also conform to the relevant IS and IE rules.
- g. Transformer body earthing and Neutral earthing connections shall be provided by fixing necessary length of Copper/GI earthing strip following best earthing practises as per relevant IS specifications.
- h. All control cables from Transformer marshalling box to transformer feeder relay panel shall be connected properly and tested for proper operation.
- i. The following tests/checks shall be conducted at site on the transformer prior to its commissioning.
 - Insulation resistance of windings
 - Voltage ratio test at all tap positions
 - Polarity test
 - Operation of Buchholz relay.
 - Checking control wiring including simulation of actuation of contacts up to marshalling box and transformer feeder.
 - BDV measurement of oil filled
- j. Laying of 22kV 3Cx300sqmm cable from transformer feeder to HV cable box to be completed before application of Raychem outdoor type end termination kit and making connections on either side of the cable.
- k. Secure LV side busbar connections by installing adaptor bus duct with bus bars and other hardware as required.
- l. After commissioning of the transformer, the LV side voltage shall be measured at different tap positions. The transformer shall be kept energised on No load for 24 hours and shall be ascertained that there is no undue temperature rise or no abnormality noticed before loading the transformer.
- m. Detailed commissioning report shall be submitted with observations as per recommended procedures of OEM.
- n. Any mandatory / statutory requirement specified by the inspection authority shall also be carried out. All statutory approvals should be secured prior to commissioning of the transformer.
- o. The PCR shall reserve right to accept / reject any part of work, which is not acceptable as healthy engineering practice of carrying out such work as the case may be. In case of any failure to carry out the scope of work in time as per the instruction of PCR, the work shall be carried out / got done by the PCR at the cost and risk of the contractor and the entire amount with supervision charges shall be recovered from the contractor.

8. GUARANTEED TECHNICAL PARTICULARS OF TRANSFORMER

Guaranteed technical particulars of the transformer shall be submitted along with the tender as mentioned below. All specifications mentioned shall be as per relevant IS specifications.

TABLE-2: GTP OF TRANSFORMER

SrNo	Technical Particulars	As per Tender	As Furnished by Bidder
1	Name of Manufacturer	To be specified	
2	Service	Distribution	
3	Installation	Outdoor	
4	Rated KVA	2000kVA	
5	Rated Voltage HV	22kV	
6	Rated Voltage LV	433V	
7	Rated Frequency	50 Hz	
8	Vector Group reference	Dyn11	
9	No of Phases	Three	
10	Cooling	ONAN	
11	Terminal arrangement	HV: Cable Box, LV: Busduct	
12	Reference Ambient Temp	50 °C	
13	Temp. Rise in Oil/Winding.	40 / 45 °C	
14	Tap Changer	Off - Circuit	
	Tapping Range	+5% to -10%	
	No of Steps	6 Steps of 2.5%	
15	Bushing HV	36kV/ 250A	
16	Bushing LV	1.1KV/ 3300A	
17	Performance Figures	To be furnished	
	Total loss at 50% Load kW max.		
	Total loss at 100% Load kW max.		
	Impedance in % (IS Tolerance)		
18	Efficiency (%) at 75°C, Unity PF	To be furnished	
	At 100% Load		
	At 75% Load		
	At 50% Load		
	At 25% Load		
19	Efficiency (%) at 75°C, 0.8 PF	To be furnished	
	At 100% Load		
	At 75% Load		
	At 50% Load		
	At 25% Load		
20	Max. Efficiency at Unity PF	To be furnished	
21	Load at which Max. Efficiency at Unity PF Occurs	To be furnished	
22	Regulation (%) at Full Load	To be furnished	
	Unity PF		
	0.8 PF		

23	Separate Source Power Frequency withstand Voltage	To be furnished	
	HV Winding		
	LV Winding		
24	Induced Over Voltage withstand	To be furnished	
25	Rated Impulse voltage on HV	To be furnished	
26	Approximate Weight kG	To be furnished	
	Core & Winding		
	Oil		
	Total Weight		
27	Radiator material/thickness -mm	CRCA sheet steel/ 1mm	
28	Insulating Oil	Mineral Oil (IS-335)	
29	Noise Level	As per NEMA TR-1	
30	Transformer Overloading	As per IS:2026 Part-7	
31	Overall dimensions- Lx B x H (m)	To be furnished	
32	Painting as per IS-5	Shade 631	

9. MAKE OF TRANSFORMER

Preferred makes of transformer are as below.

- CROMPTON GREAVES
- SCHNEIDER
- KEL
- VOLTAMP
- BHARAT BIJLEE
- ESSENNAR
- ECE INDUSTRIES LTD
- KAVIKA
- HAMMOND POWER SOLUTIONS

10. DELIVERY SCHEDULE

Delivery schedule is essence for this contract. Party shall adhere to the delivery date mentioned in this tender and same shall be confirmed along with the offer. In case Party is unable to meet the delivery schedule, the offer is liable for rejection.

Delivery schedule for supply of transformer including installation, testing and commissioning is as below,

TABLE-3 : DELIVERY SCHEDULE

Sr NO	Description	Preferred time by PCR	Compliance by the bidder
1	Submission of all Drawings	Within two weeks from the date of release of PO	
2	Approval of Drawings by PCR	Within one week from the above task	
3	Manufacturing / Integration	Within 18 weeks from the above task	
4	Intimation of readiness	Minimum 15 days in advance	
5	Inspection & testing at works	Within two weeks after manufacturing & integration	
6	Removal & Shifting of Existing Transformer	Prior to Dispatch of New transformer to Site	
7	Delivery to Site	Within two weeks from the previous task completion	
8	Readiness intimation by Dept. for Installation	Minimum 15 days in advance	
9	Installation, Testing & Commissioning at Site.	Within three weeks from the previous task completion	
10	Statutory Approvals	With installation & Commissioning of Transformer.	
11	Total completion of the order	28 weeks	

The above delivery schedule is the maximum period. Early delivery schedule is preferred. Intermediate milestones as identified mutually after placement of order shall be met with.

11.Data/ drawings

Following drawing / data shall be submitted in Hard Copy (03 Copies) along with a Soft copy.

- a. General Arrangement of Transformer
- b. Foundation Drawings
- c. Terminal Box HV/LV with Adaptor Bus duct
- d. Marshalling Box Wiring.
- e. O & M Manuals
- f. All test reports

12.GUARANTEE / WARANTEE

This shall be valid for a period of **18 months** from date of supply or 12 months from the date of commissioning **whichever is later**.

13.PAYMENT TERMS

100 % within 30 days of completion of work in all respect.

14. COMPLIANCE STATEMENT

Compliance statement which shall be necessarily filled and submitted failing which the offer will be summarily rejected.

TABLE-4 : COMPLIANCE STATEMENT

Sr No	DESCRIPTION	Compliance Yes/ No
1	Scope as per tender document	
2	Specifications for Transformer as per tender	
3	List of Fittings and Accessories as per tender	
4	Delivery Schedule as per tender document	
5	Tests conducted at factory/works of supplier as per tender	
6	Transformer installation, testing and commissioning as per tender	
7	Terms and conditions as per tender document	
8	Guaranteed technical particulars duly filled and submitted as per tender document	
9	Warranty as per tender document	
10	Bid Qualification Criterion with supporting document	
11	Payment terms as per tender document	
12	Performance Bank Guarantee and Security Deposit as per Tender Document	
13	Compliance statement submitted as per tender document	
14	Deviations if any from the Terms & Conditions Attach separate sheet if required Otherwise mention as "NIL"	

15.TWO BID FORMAT

Online bids shall consist of the following. Technical bids shall be evaluated first and only technically suitable offers shall be considered for Price bid evaluation. Bidder should not disclose any prices in the technical bid submission & evaluation.

Part-I : Technical and Unpriced Commercial

Technical and un-priced commercial part shall comprise the following documents/information.

- a. Duly filled BID QUALIFICATION CRITERION
- b. Duly filled Guaranteed Technical Particulars for Transformer.
- c. Duly filled Delivery Schedule
- d. Duly Filled Compliance Statement.
- e. List and make of the bought-out components as well as imported items considered by bidder for this tender.
- f. Any other relevant document bidder desires to submit.

Part-II : Price Bid

Price bid shall contain schedule of prices to be filled online. Quoted price shall be inclusive of transportation, labour, material cost as mentioned in scope of work. As the items are interdependent, combined lowest cost shall only be considered for award of work. **No splitting of order is envisaged.**

16. BID QUALIFICATION CRITERION

Bidders who are qualifying / meeting the following Technical and Financial capabilities are eligible to participate in the bid for Supply, Installation, Testing and Commissioning of Transformer

TABLE-5 : BID QUALIFICATION CRITERION

Sr No	Criterion / Requirement	Fulfilled / NOT Fulfilled
1	The complete scope of work is defined in the tender document. Bidder undertakes total responsibility for the complete scope of work as defined in the tender document.	
2	The Bidder should be an organization with previous experience of having executed Supply, Installation, Testing and Commissioning of minimum Two Transformers of rating not less than 22kV (HV side) and Capacity 1000 KVA in the last Five years which are working successfully. Enclose Documentary evidence like order issued, completion certificates etc.	

3	Service network of the OEM shall be available in Maharashtra to extend service support within 24 Hours. The contact details of the service provider in Maharashtra shall be mentioned.	
4	Bidder shall have qualified engineering team for erection, testing and commissioning. Alternatively, bidder should undertake to hire engineer and technicians from OEM to complete installation & commissioning work. Cost of such an arrangement shall be borne entirely by the bidder.	
5	Bidder shall be either OEM or Authorized Dealer for Transformer to be supplied. Mention whether Bidder is OEM or Authorized Dealer. In case of Authorized Dealer, necessary certificate from OEM shall be enclosed.	
6	Bidder should have executed orders of Similar Nature i.e. Supply, Installation, Testing and commissioning of Transformers of values as stipulated below in the last THREE years. a. Single order of value not less than Rs 46 lakhs or b. Two orders each of value not less than Rs 35 lakhs or c. Three orders each of value not less than 23 lakhs	

Documentary evidence shall be enclosed with the tender to justify fulfilment of each criterion.

End of Document.

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
SATISH DHAWAN SPACE CENTRE SHAR SRIHARIKOTA (SDSC SHAR)
NELLORE**

Tender for SITC of 22kV/433V 2MVA Transformer

Bids to be submitted online

Tender No.: SDSC SHAR/PCR Purchase/SH202200076701 dated 22-11-2022

A. Tender Details

Tender No : **SDSC SHAR/PCR Purchase/SH202200076701**

Tender Date : **22-11-2022**

Tender Classification: **WORKS**

Purchase Entity : **PCR Purchase**

Centre : **SATISH DHAWAN SPACE CENTRE SHAR SRIHARIKOTA
(SDSC SHAR)**

SITC of 22kV/433V 2MVA Transformer

Supply, Installation, Testing & Commissioning of 22KV/433V, 2MVA Transformer at PCR

A.1 Tender Schedule

Bid Submission Start Date : **22-11-2022 14:00**

Bid Clarification Due Date : **29-11-2022 14:30**

Bid Submission Due Date : **22-12-2022 14:00**

Bid Opening Date : **23-12-2022 14:30**

Price Bid Opening Date : **16-01-2023 14:30**

B. Tender Attachments

Technical Write-up/Drawings

Document : [Scope & Specifications for SITC of 2MVA Transformer](#)

Instructions To Vendors

C. Bid Templates

C.1 Technical Bid - SITC of 22kV/433V 2MVA Transformer

1. Oil Filled Transformer

Manufacture, Testing at Manufacturer's facility including Delivery to PCR of 22kV/ 433V, 2MVA, Oil Filled Transformer as per attached Annexure-I.

2. Oil Filled Transformer

Installation, Testing at Site and Commissioning of 22kV /433V, 2MVA Transformer including all statutory Approvals and Clearances as per attached Annexure-I.

3. Oil Filled Transformer

Disconnection, Dismantling & Shifting to stores of existing 3.3kV/433V, 2MVA Transformer as per Annexure-I

4. Oil Filled Transformer

Supply & Application of Outdoor Type Raychem End Termination suitable for 22kV, 3Cx300sqmm XLPE cable compete as per Annexure-I

Common Specifications (Applicable for all items)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Site Location	Propellant Complex Rasayani (PCR), Rasayani, District-Raigad, MH-410207.	Yes / No / Explain		
2	Delivery	Prices shall be quoted on the basis of delivery of transformer & other required material to PCR. Cost of Transportation & Transit Insurance are fully in the scope of supplier and the same shall be included in the cost quoted by the bidder.	Yes / No / Explain		

3	Shifting of Old Transformer	Disconnection, Dismantling, Shifting of existing 3.3kV/415V, 2MVA Transformer to PCR Stores. Weight of transformer to be shifted is approx. 5100 KG.	Yes / No / Explain		
4	Submission of Documents	Submission of following drawings upon receipt of Purchase Order for approval of department before manufacturing: General arrangement drawings & Name Plate Details Foundation drawings Terminal boxes of HT / LT side with details of HT and LT bushings/insulators Marshalling box drawings	Yes / No / Explain		
5	Manufacturing of Transformer	Design, Manufacture, Testing at factory, Supply, Installation & Testing at site and Commissioning of 22kV / 433V, 2MVA, Dyn11, ONAN Transformer as per specifications- 1No.	Yes / No / Explain		
6	System	System Nominal Voltage 22kV, 3 Phase, 50Hz, 26.3kA/1S, Neutral solidly grounded.	Yes / No / Explain		
7	Transportation	Loading / Unloading, Transportation of Transformer & it's components to site location. All guidelines of OEM shall be strictly followed while equipment is being transported.	Yes / No / Explain		

8	Foundation	<p>Removal of existing MS channels by demolition of concrete floor. Supply and Grouting of new channels/rails of suitable size as per the foundation plan of new transformer.</p> <p>Necessary locking arrangement for transformer wheels shall be ensured. Any civil works to be carried out to match existing bus-duct with transformer LV terminal box shall be entirely in contractor's scope.</p>	Yes / No / Explain		
9	Earthing	<p>Extending existing neutral and body earthing to the transformer.</p> <p>Necessary length of earthing strips – Copper strips for Neutral & GI strips body earthing shall be supplied and installed at no extra cost. The contractor shall ensure that the earth strips are properly connected to the respective terminals.</p>	Yes / No / Explain		
10	HT Terminations	<p>Supply and application of Raychem outdoor type end termination for HV side connections suitable for 22kV 3Cx 300sqmm XLPE cable. Scope includes supply & fixing of Raychem 22kV Boots in Transformer HV Terminal Box as per recommendations of transformer manufacturer. Cable shall be provided by the PCR. Laying of cable thro' existing trench is in contractor's scope</p>	Yes / No / Explain		

11	LV Bus Duct	Existing LV side connections are through Bus-duct. LV Cable box of the new transformer shall match the existing bus duct. If required Contractor shall provide at no extra cost, adaptor bus-duct along with required length of aluminium busbars of suitable size and other hardware to complete LV side connection to the satisfaction of the purchaser.	Yes / No / Explain		
12	Control Cables	Supply, Laying and Termination of 2.5sqmm size control cables required for protection interlocks. Approximate distance between transformer and 22kV Feeder is @50m.	Yes / No / Explain		
13	Statutory Approvals	Approval of Electrical Inspector & Statutory clearances including Plan & Final approval.	Yes / No / Explain		
14	Charging of Transformer	Charging of Transformer and recording observations as per OEM guidelines.	Yes / No / Explain		
15	Testing Equipment	All necessary instruments, meters, wires etc, tools and plants required for conducting the site tests shall be brought by the contractor.	Yes / No / Explain		
16	Manpower	Providing necessary Technicians, Engineers, unskilled manpower & Material handling equipment for carrying out above works at site shall be the responsibility of the contractor.	Yes / No / Explain		

17	Area available for Transformer	Area available for installation of transformer is 6.7x5.6m. It includes area required for movement of persons for supervision & maintenance of transformer.	Yes / No / Explain		
----	--------------------------------	---	--------------------	--	--

Supporting Documents required from Vendor

1. Supporting Documents e.g copy of orders executed, completion certificate etc as per Table-5 of Annexure-I for Bid Qualification Criterion

2. Compliance Statement as per Table-4 of Annexure-I

3. Guaranteed Technical Particulars of Transformer as per Table-2 of Annexure-I

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	LV terminal box of the new transformer shall match the existing bus duct. If required Contractor shall provide at no extra cost, adaptor bus-duct along with required length of busbars of suitable size to complete LV side connections.	Yes / No / Explain	
2	Approval of Electrical Inspector & Statutory clearances including Plan & Final approval are in the scope of contractor..	Yes / No / Explain	
3	Till commissioning of the equipment, the safe storage and handling of all equipment and other items supplied are in the scope of contractor.	Yes / No / Explain	
4	The complete scope of work is defined in the Tender document. only those bidders who undertake total responsibility for the complete scope of work as defined in the tender document shall be considered.	Yes / No / Explain	
5	P & F charges, if any, please mention percentage/amount. Note: Suppliers are requested to explicitly state whether Quoted percentage is Extra or Inclusive, If Not i.e, if you quote as "YES/Accepted /Noted/ As per tender specifications" it will be treated as included in the quoted basic cost. Please note that in case of Two part tenders, only percentage should be mentioned otherwise those offers shall be summarily rejected.	Yes / No / Explain	
6	Taxes: GST if any, please mention percentage (HSN/SAC code shall be indicated for each item and accordingly mention the GST Rate applicable as per prevailing guidelines.) Note: Suppliers are requested to explicitly state whether Quoted percentage/amount is Extra or Inclusive, If Not i.e, if you quote as "YES/Accepted /Noted/ As per tender specifications" it will be treated as included in the quoted basic cost.	Yes / No / Explain	

7	<p>Do you have Unique GeM Seller ID? If YES, provide details If NO, As per Office Memorandum No 6/9/2020-PPD dated 24/08/2020 of Department of Expenditure, it shall be mandatory for sellers providing Goods and Services to Central Government Organizations to be registered on GeM and obtain a Unique GeM Seller ID, at the time of Placement of Order/acceptance of contract. Tenderers shall ensure the same.</p>	Yes / No / Explain	
8	<p>Please mention your GST registration details & enclose a copy of GST Registration. GST No. for PCR- GSTIN: 27AAAGS1366J1Z2</p>	Yes / No / Explain	
9	<p>In case of Specific Brand items, Please provide Authorization certificate from OEM.</p>	Yes / No / Explain	
10	<p>As per Notification No. 05/2018 CUSTOMS Dtd. 25.01.2018 ISRO is eligible to reduced rate of customs duty @ 10.775% (CD@5% plus Surcharge@10% plus IGST@ 5%). In case of foreign component involved, We will provide Customs Duty Exemption Certificate in case of Import Orders/ imported supplies/ High Sea Sales. In this connection, tenderer has to provide the following.</p> <p>(i) Please indicate whether your rate is inclusive of this Customs duty @ 10.775% or extra.</p> <p>(ii) what would be the percentage of foreign exchange component you have considered in your quote.</p> <p>(iii) List of items with approximate quantities which require customs duty exemption certificate to be provided.</p> <p>Note: Suppliers are requested to explicitly state whether Quoted percentage is Extra or Inclusive, If Not i.e, if you quote as "YES/Accepted /Noted/ As per tender specifications" it will be treated as included in the quoted basic cost.</p> <p>Please note that in case of Two part tenders, only percentage should be mentioned otherwise those offers shall be summarily rejected.</p>	Yes / No / Explain	

11	<p>Delivery Term:- FOR : PCR,Rasayani In case of Foreign orders, FOB or FCA or EX-WORKS. Note: Suppliers are requested to explicitly state whether Quoted Delivery Term as FOR-PCR / Ex-Works Etc.. If Not i.e, if you quote as "YES/Accepted /Noted/ As per tender specifications" it will be treated as FOR-PCR. Further clarification will not be sought.</p>	Yes / No / Explain	
12	<p>Freight charges, if any. If YES please mention the percentage / amount. Note: Please state Whether Quoted percentage/amount is Extra or Inclusive, if not it will be treated as included in the quoted cost Please note that in case of Two part tenders, only percentage should be mentioned otherwise those offers shall be summarily rejected.</p>	Yes / No / Explain	
13	<p>Delivery Schedule as per Tender specifications:</p>	Yes / No / Explain	
14	<p>Payment Term :- 100% payment shall be made through PFMS within 30 days of erection & commissioning and acceptance of the item at our site. OR Payment terms as per Specifications</p>	Yes / No / Explain	
15	<p>Liquidated Damages (LD) :- Since delivery is the essence of this order, LD @ 0.5% per week or part thereof subject to a maximum of 10% of the order value for the delayed period of scope of work</p>	Yes / No / Explain	
16	<p>Warranty:- Warranty for the offered item shall be from the date of installation/acceptance of the item at our site for a minimum period of one year or as specified in the tender document.</p>	Yes / No / Explain	
17	<p>Performance Bank Guarantee (PBG) :- You have to submit a PBG from a Nationalised / Scheduled Bank for 3 % of the order value at the time of supply valid till the completion of warranty period plus 60 days towards claim period.</p>	Yes / No / Explain	

18	Security Deposit (SD) :- 3 % value of the order shall be deposited with SDSC within 10 days from the date of the Purchase Order towards security deposit in the form of Bank Guarantee towards performance of the Contract valid till completion of the contract period plus sixty days towards claim period. (This will be returned by SDSC immediately on execution of the order satisfactorily as per order terms. If not, the amount will be forfeited).	Yes / No / Explain	
19	In case, if parties are unable to provide two separate BGs, i.e., one for SD & one for PBG, they can submit a combined BG for SD & PBG for 3 % of the Order value valid till the completion of total contractual obligation (i.e., Supply period plus warranty period plus 60 days). Please confirm.	Yes / No / Explain	
20	Insurance :- Being a Govt. Of India Dept., Insurance is not required at our cost. Please ensure the safe delivery of the ordered item with proper transport worthy packing.	Yes / No / Explain	
21	Validity of Offer :- The validity of the offers 120 days (two part tender) from the date of opening of the tenders. Tenders shorter than offer validity mentioned above will not be considered for evaluation.	Yes / No / Explain	
22	In case of foreign orders, (a) Please specify whether any Export clearance is required. (b) Please specify whether any agency commission is involved or not	Yes / No / Explain	
23	Special conditions against Indian Agents submitting quotations in Foreign Currency. (a) Foreign Principals proforma invoice indicating the commission payable to the Indian Agent and nature of after sales service to be rendered by the Indian Agent. (b) Copy of Agency agreement with the Foreign Principal, precise relationship between them and their mutual interest in the business. (c) The enlistment of the Indian Agent with Director-General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.	Yes / No / Explain	

24	Police Verification: The Contractor would be required to provide verification report from the local police authorities within one month from the date of receipt of the order, duly certifying the verification of the Character & Antecedents for each of the work force engaged by the contractor for executing the work.	Yes / No / Explain	
25	The Contractor shall verify/certify the conduct of the work force at frequent intervals. If any of the work force misbehaves or commits any misconduct, SDSC SHAR reserves the right to refuse permission to such persons to enter the premises and such work force shall be withdrawn by the contractor immediately.	Yes / No / Explain	
26	The Contractor shall employ Indian Nationals above age of 18 years only.	Yes / No / Explain	
27	The Contractor should have license to engage laborers under the provisions of Contract Labour (Regulation & Abolition) Act, 1970. Enclose a copy of Labour License as proof for the existing/ previous work order.	Yes / No / Explain	
28	The Contractor should comply all Labour Laws, Minimum Wages Act, Payment of Employees Provident Fund, ESI and Bonus under workmen Compensation Act and other laws applicable from time to time.	Yes / No / Explain	
29	Please provide an undertaking for the compliance of all Labour Laws as applicable from time to time including Minimum Wages Act, Payment of ESI/ EPF/ GST etc.	Yes / No / Explain	
30	INCOME TAX: Income Tax at the prevailing rate as applicable from time to time shall be deducted from the successful Bidders bill as per the Income Tax Act, 1961 and the rules there-under or any re-enactment or Modifications thereof.	Yes / No / Explain	
31	Remarks if any	Yes / No / Explain	
32	Please provide valid/currently using E-mail Id & Contact No. for seeking further clarifications if any	Yes / No / Explain	

33	<p>For this procurement, bids from Class-I & class-II Local Suppliers are admissible. Hence provisions contained in Public Procurement (Preference to Make in India), Order 2017 issued by Department for Promotion of Industry and Internal Trade (DIPP), Ministry of Commerce & Industries vide letter No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 and subsequent amendment & directives shall be followed. Accordingly, offer will be evaluated & processed in conformation with above referred GOI order (Specially mentioned below). The bidder shall provide compliance and undertaking as per order and hereafter amendments: Order no: F.No.6/18/2019 PPD dated 23.07.2020 of Department of Expenditure), Ministry of Finance Under Public procurement division for the General Financial rule (GFRs).</p> <p>(a) Class-I local supplier means a supplier or service provider, whose goods, service or works offered for procurement, has local content equal to or more than 50%, as defined under order.</p> <p>(b) Class-II local supplier means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under this Order.</p> <p>You are requested to provide Self Declaration Certificate that the offered Item meets Local Content Requirement of Class 1 or Class 2 as per Make in India(MII) Policy, clearly indicating the Percentage of local content & the details of Location(s) at which value addition is made in the offered product.</p> <p>It may be noted that Local Content shall not include services such as Transportation, Insurance, Installation, Commissioning, Training and after sales service support like AMC/CMC etc.</p>	Yes / No / Explain	
----	--	--------------------	--

34	<p>Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1 plus 15% (Selected by Buyer) of margin of purchase preference/price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total QUANTITY. Clearly specify whether you are eligible for MSE Preference. If YES, supporting documents shall be uploaded.</p>	Yes / No / Explain	
35	<p>Border Sharing Compliances : Please refer OM/order No.: F. No. 6/18/2019-PPD dt: 23.07.2020 issued by Govt. of India w.r.t. Border Sharing compliances. All the provisions mentioned in the said OM/order shall be complied. Please provide certificate w.r.t. border sharing compliances as per the said OM/order. Please note that if the declaration is found false, your offer will be rejected.</p>	Yes / No / Explain	

36	<p>FORCE MAJEURE: If at any time during the continuance of the order the performance in Whole or part by either party of any obligation under this order shall be prevented or Delayed by reasons of any war, hostility, acts of public enemy, civil commotion, Sabotage, fire, floods, lightening, epidemic, quarantine restrictions, strikes, go slow, Lockout or acts of God, notice of which is given either party to the other within 21 days, From the date of occurrence thereof, neither party shall be reasons of such eventually Be entitled to terminate this order nor shall either party have any claim for damages Against the other in respect of such non-performance or delay in performance.</p>	Yes / No / Explain	
----	--	--------------------	--

37	<p>ARBITRATION: The Contract shall be interpreted, construed and governed by the Laws in the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Work Package Order(s), such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good office of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s difference/s, or claim/s shall be referred to the Sole Arbitrator appointed by the parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time. The arbitration shall be conducted in Mumbai in the Arbitration and Conciliation Centre- Mumbai(Domestic and International) as per its Rules and regulations. The expenses for Arbitration shall be shared equally or as may be Determined by the Arbitrator. The considered and written of the Arbitrator shall be final And binding between the Parties. The applicable language for Arbitration shall be English only.</p>	Yes / No / Explain	
----	---	--------------------	--

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	Oil Filled Transformer Manufacture, Testing at Manufacturer's facility including Delivery to PCR of 22kV/ 433V, 2MVA, Oil Filled Transformer as per attached Annexure-I.	1.00 Job		-		

2	Oil Filled Transformer Installation, Testing at Site and Commissioning of 22kV /433V, 2MVA Transformer including all statutory Approvals and Clearances as per attached Annexure-I.	1.00 Job				
3	Oil Filled Transformer Disconnection, Dismantling & Shifting to stores of existing 3.3kV/433V, 2MVA Transformer as per Annexure-I	1.00 Job				
4	Oil Filled Transformer Supply & Application of Outdoor Type Raychem End Termination suitable for 22kV, 3Cx300sqmm XLPE cable compete as per Annexure-I	2.00 Job				

Common charges (Applicable for all items)

FREIGHT PER COMMON	
P&F PER COMMON	