



**Government of Pakistan
PAKISTAN ORDNANCE FACTORIES
TENDER ENQUIRY**

Dear Sir,

Reference: Tender Enquiry [467-LP-Capt-DS-Elect](#) dated: [20-11-2018](#)

POF (Services Group) intends to procure "**132KV Grid Station Equipment for Up-Gradation & Modernization.**"
as per PPRA Rule 36 (d) i.e "Two Stage Two Envelope Bidding Procedure"

You are requested to submit sealed quotations for the item(s) noted in the Schedule to the Tender. Offer should be sent duly sealed in an envelope. Please note the following instruction for filling the tender.

1. SUBMISSION OF TECHNICAL OFFER

1.1 Tender will be opened at [1230](#) hours on [19-12-2018](#) and must reach this office before [1230](#) hours upto due date. The tender received late will not be entertained. You may witness the opening of the tender if you so desire. If representative is deputed, he should bring a letter of authority from you.

1.2 Only one tender should be included in one envelope. The outside of the envelope should be inscribed with:

Tender Enquiry No. [467-LP-Capt-DS-Elect](#)

Offer to be opened on [19-12-2018](#)

Address as follows: [Director Services, POF Wah Cantt](#)

1.3 If envelope do not indicate reference of T.E or received late the same may be returned un-opened.

2. GENERAL INSTRUCTIONS REGARDING PREPARATION OF QUOTATIONS

2.1 For materials, the prices should be filled in column 5 and delivery date in column 6 at para 1 of the schedule to this Tender Enquiry. The undertaking should be signed at the bottom of the schedule, which shall form the Quotation. You may use a separate sheet, if necessary.

2.2 You are required to quote according to PPRA rule 36(d) as follows:-

a) **First Stage** submit single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal. Technical proposal should be according to the specification attached as per Annexure-A,B,C,D & E. "**Technical Offer**" should exclusively give technical details and literatures/brochures of the offered plant, machinery and equipment; validity date; delivery schedule; signed undertaking given on the schedule to this Tender Enquiry. It must not indicate price, costs etc.

b) **Second Stage** after evaluation, the bidders whose technical proposal is accepted will further be invited the revised technical proposal alongwith original financial proposal and supplementary financial proposal. "**Commercial Offer**" should indicate the commercial terms e.g. price, Bill of Material (BOM), item wise breakdown of prices, terms of payment, mode of payment, mode of supply, validity date.

Each part should be placed in a separate sealed cover. The envelopes should be inscribed with: Part I "Technical Quotation without price" and Part II "Commercial Quotation with price".

- 2.3 The quotation must remain valid for, at least **120 days** from the date of opening of tenders.
- 2.4 The quotation should hold good for any reduced or enhanced quantities without notice.
- 2.5 In the event of non acceptance of offer, intimation may be given to the tenderers on their request.
- 2.6 Conditional offers or alternative offers are likely to be ignored.
- 2.7 Quotations should be based on:
F.O.R. station of dispatch basis, i.e. delivered free on rail, inclusive of packing and forwarding charges. The stores will be booked under military credit note, to be provided by the purchaser.
and/or
Free delivery at POF's stores at WahCantt. In this case Octori duty will be payable by the supplier.
- 2.7 Taxes and duties etc. where applicable, must be shown separately, quoting references to Registration No. in cases of Sales Tax and relevant authority, in case of others. Offers without these clarifications and inclusive of Taxes and duties, may be ignored.
- 2.8 Taxes and duties levied on or after Tender opening date or on or after the date offer was signed and dispatched will be allowed to include in the offered rates.
- 2.9 "Suppliers will furnish a certificate, issued by Excise & Taxation deptt, that he has cleared all Professional Tax payable by him". Offers received without this certificate will be rejected.
- 2.10 If the requisite information is not furnished on the T.E forms or offer received is not in conformity with the requirement of T.E such offer shall be ignored.
- 2.11 Supplier will render necessary information regarding hazardous effects on environment of the materials/products supplied by them, in their quotations and shipping / dispatch documents.
- 2.12 If the requisite information is not furnished on the T.E forms or offer received is not conformity with the requirement of the T.E such offer shall be ignored.

3. **INSPECTION**

- 3.1 Inspection will be carried out by 02 officials at manufacturer premises as per "**terms & condition**" attached as Annexure' **F**' including air tickets, boarding, lodging etc. All the store will be also physically inspected & checked jointly by POFs + firms team at POFs premises, rejected items will be replaced free of cost by supplier.
- 3.2 Where considered necessary by the Purchaser, stores may be obtained on Warranty/Guarantee, subject to inspection on receipt. Rejected stores will be removed and replaced with the acceptable stores by the Supplier at his own expense, within a specified time.

4. **TENDER FEE**

The tender must be accompanied by a non-refundable fee by means of a crossed postal order / pay order off **Rs. 500** in favor of **Director Services, POFs Wah Cantt.**

4.1 **Tender Sample:**

Where required, offer must a company tender sample, strictly according to the description and specification given in tender enquiry. Offer not accompanied by tender sample will not be entertained excepting the established and reputable firms who have either previously satisfactorily supplied the same or similar stores or have submitted an acceptable sample thereof against previous T.E.

5. **BID MONEY**

5.1 Bid Money at the rate of 2% (for registered firms) and 5% (for unregistered firms) of the quoted value should accompany the tender in the shape of Deposit At Call Receipt/ pay order/ Banker's Cheque, from a scheduled Bank drawn in favor of **DIRECTOR SERVICES, POF WAH CANTT.**

Tenders received without Bid Money will be rejected.

5.2 Bid Money of the unsuccessful tenders will be returned as soon as the scrutiny of the tenders is completed. Bid Money of the successful tenders will be retained until the contract is finalized. Bid Money will be forfeited in case the quotation is withdrawn before the expiry of its validity date.

5.3 State owned organizations are not required to provide Bid Money.

6. **ACCEPTANCE OF OFFERS**

6.1 The procuring agency may reject all bids or proposals at any time prior to the acceptance of a bid or proposal. The procuring agency shall upon request communicate to any supplier or contractor who submitted a bid or proposal, the grounds of all bids or proposal, but is not required justify those grounds.

6.2 Procuring agency shall incur no liability, solely by virtue of its invoking sub-rule (1.1) towards suppliers or contractors who have submitted or proposals.

6.3 Notice of the rejection of all bids or proposals shall be given promptly to all suppliers or contractors that submitted bids or proposals.

6.2 **PERFORMANCE BOND**

a) The successful bidders shall provide performance bond at the rate, prescribed by POF Board according to the value of contract which shall be exceed 10% of contract value, in the form of a deposit at call receipt from a scheduled Bank or an un-conditional Bank Guarantee valid for 12 Months (03 months extendable to 12 month in case of cloth items required by clothing Fy.) after receipt of store in POFs on a prescribed format. The Performance Bond will be in favor of **CMA - POF Wah Cantt.** It will be returned on satisfactory completion of the contract.

b) If the Supplier fails to furnish the Performance Bond within the specified time, such failure will constitute a breach of the contract and the Purchaser shall be entitled to make other arrangements for purchase of the stores at the risk and expense of the supplier.

6.3 Performance bond from state owned organizations may be waived off at the discretion of the purchaser.

6.4 **FAILURE TO SUPPLY THE STORES**

All deliveries must be completed by the specified date. If the failure to deliver the stores within the scheduled time should have arisen from "Force Majeure", which the purchaser may admit as reasonable ground for further time, he will allow such additional time as he may consider to have been required by the circumstances of the case. Otherwise, he will be entitled, at his discretion, to cancel the contract; and/or claim liquidated damages upto 2% but not less than 1% of the contract price of the items and their quantities for each and every month or part of a month, beyond the specified delivery date, during which these may not be delivered, subject to a maximum of 10% of the total contract value of the particular stores which remained unsupplied either in part or in full; or to purchase from elsewhere the unsupplied stores at the risk and cost of the supplier.

6.5 **PAYMENT**

- a 80% Payment will be made by CMA- POF Wah Cantt through crossed Cheque on receipt/acceptance of stores at POF wahcantt.
20% Payment will be released after FAT (Final Acceptance Test).
- b Payment of duties / Taxes including professional tax (where applicable) must be supported by proof of having paid these to concerned Govt. Taxation Deptt.

7. **SECURITY OF INFORMATION**

The tenderer and his employees must not communicate any information relating to the sale/purchase of stores under this enquiry to any person other than the manufacturer or to any press or agent not authorized in writing by POFs to receive it.

Please return the schedule to the Tender duly signed by the specified date, alongwith the specifications, drawings etc. if any, enclosed herewith even if you are unable to quote.

WARNING

In case the firm abstain from making offers or fail to return / acknowledge the tender form by the specified date on three consecutive occasions, no further tender enquiry may be issued to them and their names would liable to be removed from the approved list.

Yours faithfully,

Director Services

Tele (051) 9055(21090/21099)

Fax (051) 9271400 & 9314100

PAKISTAN ORDNANCE FACTORIESSchedule to Tender Enquiry NO. **467-LP-Capt-DS-Elect**, dated **19-11-2018**.To be opened on **19-12-2018**.**(1) FOR MATERIALS**

1	2	3	4	5		6
Item No	Description	Unit	Qty	Price per unit For free delivery at POF-Wah		Delivery date
				Price in figure	Price in words	
1)	132 KV three pole SF6 Circuit Breaker , 2000 Ampere, 40KA along with Steel support structure (SSS) (as per attach Annexure-A)	Sets.	05			
2)	132 KV Three pole Bus Isolator along with Steel support structure (SSS) (as per attach Annexure-B)	Sets.	03			
3)	132 KV single pole Current Transformers (CTs) 100-200/5/5/5 Ampere along with Steel support structure (SSS) (as per attach Annexure-C)	Nos.	15			
4)	Relay Panel RP-4 for power transformers protection (as per attach Annexure-D)	Nos.	05			
5)	Control Panel CP-50 for power transformers (as per attach Annexure-D)	Nos.	05			
6)	Oil Temp Gauge for Power transformer (as per attach Annexure-E)	Nos.	05			
7)	Winding Temperature Gauge for Power transformer (as per attach Annexure-E)	Nos.	05			

2. For Plant & Machinery:

Specifications: - Attached as **Annexure-A,B,C,D and E**Specifications may be downloaded from POF Website (www.pof.gov.pk).3. **Miscellaneous Requirements:**

i)	Indicate the model, name of the manufacturer, country of origin and also provide authorization letter from their respective OEM along with technical brochure of the material / product in English language being offered.
ii)	Breakdown of rates be given showing price and sales tax separately. Otherwise your quoted rates will be considered inclusive of GST.

iii)	Quotation may be submitted if you are registered with sales tax department. Sales tax registration number may also be indicated in your offer.
iv)	Only registered suppliers (with sales Tax & income Tax Deptt), who are on Active Taxpayers List (ATL) of FBR are eligible to supply goods/ services.
v)	The payment to the registered firms may be linked with the active taxpayer status of the suppliers as per FBR database. If any registered supplier is not in ATL, their payment will be stopped till they file their mandatory return and appear on ATL of FBR.
vi)	Valid type test report from STL lab preferably from KEMA Netherlands, PHELA Germany, KERI South Korea, CESI Italy, SATS Norway, JSTC Japan is mandatory for Circuit Breaker, Disconnecter & 132KV Current transformers. Any miscommunication/wrong information in this regard will be viewed seriously and it will render the offer of such bidder rejected
vii)	a) Firm will provide their complete company profile along with following information in the technical part of the tender
	b) Detail of firm's capabilities, experience & performance in relevant field as mentioned in this tender.
	c) Complete data of the similar product supplied to any organization/industry or installed anywhere in Pakistan during last five year.
	d) Detail of testing facilities of the product available at firm's premises.
viii)	Inspection: Physically inspection at site, all the store will be physically checked jointly by POFs + firms team at POFs premises, any rejected item will be replaced free of cost by supplier.
xi)	Pre-shipment Inspection: will be carried out at manufacturer premises by 02 officials of POFs. Inspection will be arranged by supplier on firm's expenses including air tickets, boarding and lodging.
x)	Warranty/Guarantee:- All the equipments provided will be against warranty/guarantee for the period of 24 Month from the date of final successful testing

(4) Undertaking:-

Should our offer be accepted, we hereby undertake to supply the stores/render the services contracted on the basis of General Conditions of Contract embodied in Form POF 1281 - A, and to deposit the performance bond within the prescribed time, failing which it will constitute a breach of contract, and POF will have the right to purchase the stores/services elsewhere at our risk and cost.

Place_____

Signature of the Tenderer _____

Date_____

Name_____

Position_____

Address_____

Income Tax G.I.R No. _____

Official stamp.

OUTDOOR SWITCHGEAR & INDOOR RELAY & CONTROL PANELS

S/NO	ITEM DESCRIPTION	QUANTITY
01	132 KV three pole SF6 Circuit Breaker , 2000Ampere, 40KA along with steel support structure(SSS) as per NTDC (Pepco/Wapda) Specification P-193:2010 (Amended to date)/relevant IEC standard –Having valid type test report from any STL lab preferably from KEMA Netherlands, PHELA Germany, KERI South Korea, CESI Italy, SATS Norway, JSTC Japan	05 Set
02	132 KV Three pole Bus Isolator along with steel support structure(SSS) as per NTDC (Pepco/Wapda) Specification P-128:2011 (Amended to date) /relevant IEC standard- Having valid type test report from any STL lab preferably from KEMA Netherlands, PHELA Germany, KERI South Korea, CESI Italy, SATS Norway, JSTC Japan	03 Set
03	132 KV single pole Current Transformers (CTs) 100-200/5/5/5 Ampere along with steel support structure(SSS) as per NTDC (Pepco/Wapda) Specification P-190:2012 (Amended to date) /relevant IEC standard- Having valid type test report from any STL lab preferably from KEMA Netherlands, PHELA Germany, KERI South Korea, CESI Italy, SATS Norway, JSTC Japan	15 No
04	Winding temperature Indicator (WTI), with stainless steel protected capillary Model: AKM 345 or Messko (MR) Gmbh Germany	05 Nos
05	OIL TEMPERATURE INDICATOR (OTI), with PVC protected capillary Model: AKM 345 or Messko (MR) Gmbh Germany	05 Nos

RELAY & CONTROL PANELS

S/NO	ITEM DESCRIPTION	QUANTITY
1	Relay Panel RP-4 for power transformers protection as per NTDC/Wapda Specification P.151:2008 (132 KV Control & Relay Panels) amended to date	05 No
2	Control Panel CP-50 for power transformers as per NTDC/Wapda Specification P.151:2008 (132 KV Control & Relay Panels) amended to date	05 No

TECHNICAL SPECIFICATION**132 KV CIRCUIT BREAKER SF-6 WITH STEEL SUPPORT STRUCTURES:**

As per NTDC/Wapda Spec. P 193:2010 (Amended to date)

Manufacturer	Siemens/Schneider/ Alsthom/ABB or equivalent European assembled brand
Nominal Voltage	132KV
Rated Voltage	145KV
Frequency	50 Hz
Rated current at 50 degree C ambient	2000 Ampere
Rated short circuit breaking current	40KA
Rated short circuit making current	100KA
Duration of short circuit	3 Sec
Rated Insulation Level: Lightning Impulse withstand voltage (i) Phase to Phase (ii) Phase to Earth	650KV 650KV
One minute power frequency withstand voltage (i) Phase to Phase (ii) Phase to Earth	275KV 275KV
First-pole to clear factor	1.5
Arch quenching medium	SF 6
No of poles	3
operating mechanism	1
Rated DC/Control Voltage	110 V DC
AC Voltage	240 V single phase & 415 Volt three phase-50 Hz
Total maximum break time for 0 to 100% of the rated breaking current (ms)	60 ms
Rated Dead Time	300 m sec (max)
Rated Opening Time	30 m sec (max)
Maximum Radio Interference level $1.1 U_r/\sqrt{3}$ micro V	≤ 500
Number of switching operations at: i. 100% short circuit breaking current ii.60% short circuit breaking current iii.30% short circuit breaking current iv. Maximum continuous current carrying capacity	20 40 200 5000

TECHNICAL SPECIFICATION

132 KV AC BUS DISCONNECTOR (ISOLATOR) WITH STEEL SUPPORT STRUCTURES:

As per NTDC/Wapda Spec. P 128:2011 (Amended to date)

Manufacturer	Hapam (Turkey), ASEA Sweden or equivalent European assembled brand
Nominal Voltage	132KV
Rated Voltage	145KV
Rated normal current	2000 Ampere
Rated short time withstand current	40 KA
Rated peak withstand current	100 KA
Rated duration of short circuit	3 seconds
Frequency	50 Hz
Radio Interference level $1.1 U/\sqrt{3} \leq \text{micro V}$	2500
Operating mechanism voltage	240 Volt AC 415 Volt AC three phase
Control Voltage DC	110 V DC
Number of poles	3
Lightning Impulse withstand voltage, Kv (i) Across the isolating contacts (ii) To Earth & between poles	750 KV 650 KV
Power frequency withstand voltage (dry & wet) KV (i) Across the isolating contacts (ii) To Earth & between poles	315 KV 275 KV
Power Frequency withstand voltage on auxiliary & control circuits, Kv	2 KV

TECHNICAL SPECIFICATION

132 KV CURRENT TRANSFORMERS FOR POWER TRANSFORMER WITH STEEL SUPPORT STRUCTURES:

As per NTDC/Wapda Spec. P 90:2012 (Amended to date)

Manufacturer	Elmek (Turkey), ASEA Sweden or equivalent European assembled brand
Nominal Voltage	132KV
Rated Voltage	145KV
Rated Primary current	200:100 Ampere
Rated Secondary current	5 Ampere
Rated Continuous thermal current Ith	240:120 Ampere
Rated Secondary Output (VA) at lowest tap/Ratio	Core-1 Measuring 15 VA Core-2 Protective 60 VA Core-3 Protective 30 VA
Accuracy Class	Measuring Core 0.5 Protective core 10P
Short time current	Thermal, Ith 40KA Dynamic, Dyn 100KA
Rated duration of short circuit current	1 second
Accuracy Limit Factor	20
Frequency	50 Hz
Lightning Impulse Voltage withstand on primary winding, Kv peak	650 Kv
One minute power frequency withstand voltage Kv rms (Primary) dry & wet	275 Kv
One minute power frequency withstand voltage Kv rms (Secondary)& between section, Kv rms	3 Kv
Temperature Degree Centigrade Max.	
Winding	55
Top of oil (with conservator)	40
Top of oil (without conservator)	45
Partial Discharge	
Um, PC	10
1.2 Um/ $\sqrt{3}$ 3,pC	5
C&DF (tan Delta), Max	0.005
Inter turn Insulation Level, KV Peak	4.5
Rated Mechanical static withstand load, N	2000
Rated Mechanical dynamic withstand load, N	2800

TECHNICAL SPECIFICATION

RELAY & CONTROL PANELS

Pre-wired panels as per WAPDA Specifications P 151:2008 amended to date

S/NO	NAME OF EQUIPMENT	QUANTITY
1	Transformer protection Panel (RP-4) for 132 KV system & 110 V DC, 5 Amp System	05 Nos
2	Transformer control panel (CP-50) for 132 KV system & 110 V DC, 5 Amp System	05 Nos

TECHNICAL SPECIFICATION

WINDING TEMPERATURE INDICATOR & OIL TEMPERATURE INDICATOR

As per NTDC/Wapda Spec. (Amended to date)

S/NO	NAME OF EQUIPMENT	QUANTITY
1.	<p><u>Winding temperature Indicator (WTI)</u> with stainless steel protected capillary</p> <ul style="list-style-type: none"> • Model: AKM 345 or Messko (MR) GmbH Germany • Protection Class : IP54 • Lens Material : Polycarbonate • Case finish: RAL 7000 Powder Coat finish • Mounting : Standard mounting • Range: 0-150 °C • Accuracy : $\pm 2\%$ • Cable Entry : PG16 Gland • Remote Indication: TD66 Pt100 • Number of Switches: 04 • Switch Type: SPDT • Probe Connection: M27x2mm • Probe Type : 18 • Capillary length : 06 mtrs • Chuck nut size: 1 inch • Complete with : Matching unit for 5A (Code: 44677) • Make: USA, Germany or Eqv European assembled brand 	05 Nos
2.	<p><u>OIL TEMPERATURE INDICATOR (OTI)</u> with PVC protected capillary</p> <ul style="list-style-type: none"> • Model: AKM 345 or Messko (MR) GmbH Germany • Protection Class : IP54 • Lens Material : Polycarbonate • Case finish: RAL 7000 Powder Coat finish • Mounting : Standard mounting • Range: 0-150 °C • Accuracy : $\pm 2\%$ • Cable Entry : PG16 Gland • Remote Indication: TD66 Pt100 • Number of Switches: 04 • Switch Type: SPDT • Probe Connection: M27x2mm • Capillary length : 06 mtrs • Chuck nut size: 1 inch • Make: USA, Germany or Eqv European assembled brand 	05 Nos

TERMS AND CONDITION:-

SCOPE OF WORK

- I. Installation/commissioning & Testing of 132KV SF6 Circuit breakers, Current Transformers, Bus Isolators, Transformer Control Panel (CP-50), Transformer Protection Panel (RP-4) & Winding/Oil temperature gauges of Power transformer capacity 10/13MVA at POFs site.
- II. All the equipments provided will be against warranty/guarantee for the period of 24 Month from the date of final acceptance test (FAT).
- III. Valid type test report from STL lab preferably from KEMA Netherlands, PHELA Germany, KERI South Korea, CESI Italy, SATS Norway, JSTC Japan is mandatory for Circuit Breaker, Disconnecter & 132KV Current transformers. Any miscommunication/wrong information in this regard will be viewed seriously and it will render the offer of such bidder rejected.
- IV. List of clients/Performance certificate are to be attached. Detail of such project satisfactory complete in last 5 Years.
- V. Visit of Firm before submission of proposal to access the civil work. Any civil work/control wiring shall be included in scope of work (natural +execution).
- VI. The supplier must have at least 05 years experience of manufacturing/supplying & the product should be in operation for three years (preferably) with satisfactory performance reports.

INSPECTION AND TRAINING

- I. **Pre-shipment Inspection:** will be carried out at manufacturer premises by 02 officials of POFs. Inspection will be arranged by supplier on firm's expenses including air tickets, boarding and loading.
- II. Physically inspection at site, all the store will be physically checked jointly by POFs + firms team at POFs premises, any rejected item will be replaced free of cost by supplier.
- III. **Foreign training:** standard 10 days training for 05 personals in foreign will be arranged by the supplier. The training expenses including air tickets, boarding & lodging will be borne by the supplier.
- IV. **Local Training:** After successful commissioning of equipments, at site training 05 Personals for operation and maintenance of complete system will be provided by the supplier free of cost.