

ATTACHMENT – I
(See regulation 2)

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)
CONTRACT AWARD PROFORMA – I

To Be Filled and Uploaded on PPRA Website in Respect of All Public Contracts of Works, Services and Goods Worth Fifty Million or More

➤	NAME OF THE ORGANIZATION/DEPTT:	<u>WAPDA (Power Station Tarbela)</u>
➤	FEDERAL / PROVINCIAL GOVT:	<u>FEDERAL GOVT.</u>
➤	TITLE OF CONTRACT:	Supply, Installation, Testing and Commissioning of Numerical type Distance Protection Relays (Main-I type SEL 421; Main-II type MICOM P446), Overcurrent & Earth Fault Protection Relays (Type SEL 751) and Circuit Breaker Failure Protection Relays (Type SEL 751) and all other accessories as per Tender requirement for 500KV & 220KV Transmission Lines emanating from Switchyard of Tarbela Power Station.
➤	TENDER NUMBER:	<u>Tender No. 704</u>
➤	BRIEF DESCRIPTION OF CONTRACT:	Supply, Installation, Testing and Commissioning of Numerical type Distance Protection Relays (Main-I type SEL 421; Main-II type MICOM P446), Overcurrent & Earth Fault Protection Relays (Type SEL 751) and Circuit Breaker Failure Protection Relays (Type SEL 751) and all other accessories as per Tender requirement for 500KV & 220KV Transmission Lines emanating from Switchyard of Tarbela Power Station
➤	TENDER VALUE	<u>PKR 150.00 (Million)</u>
➤	ENGINEER'S ESTIMATE (for civil Works only)	<u>N.A</u>
➤	ESTIMATED COMPLETION PERIOD	Supply of Goods : 132 Days <u>Site Installation/Services : 105 Days</u>
➤	WHETHER THE PROCUREMENT WAS INCLUDED IN ANNUAL PROCUREMENT PLAN?	<u>Yes</u>
➤	ADVERTISEMENT: (i) PPRA Website (ii) News Papers	(i) <u>Yes, PPRA Ref No. TS468394E</u> (ii) <u>Yes, Daily Jang on 25-12-2021</u>
➤	TENDER OPENED ON (DATE & TIME)	<u>25-01-2022 at 11:30 Hrs.</u>
➤	NATURE OF PURCHASE	<u>F.C.S.</u>
➤	EXTENSION IN DUE DATE (If any)	<u>Yes (25-01-2022)</u>
➤	NUMBER OF TENDER DOCUMENTS SOLD (Attach list of Buyers)	<u>12 Nos.</u>
➤	WHETHER QUALIFICATION CRITERIA WAS INCLUDED IN BIDDING/TENDER DOCUMENTS (If yes enclose a copy).	<u>Yes</u>
➤	WHETHER BID EVALUATION CRITERIA WAS INCLUDED IN BIDDING/TENDER DOCUMENTS (If yes enclose a copy).	<u>Yes</u>
➤	WHICH METHOD OF PROCUREMENT WAS USED: - (Tick one)	

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a) SINGLE STAGE – ONE ENVELOPE PROCEDURE _____

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b) SINGLE STAGE - TWO ENVELOPE PROCEDURE. _____

☐

c) TWO STAGE BIDDING PROCEDURE. _____

☐

d) TWO STAGE – TWO ENVELOPE BIDDING PROCEDURE:

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- PLEASE SPECIFY IF ANY OTHER METHOD OF PROCUREMENT WAS ADOPTED WITH BRIEF REASONS (i.e EMERGENCY, DIRECT CONTRACTING, NEGOTIATED TENDERING ETC.)

- WHO IS THE APPROVING AUTHORITY Chief Engineer (Power), Tarbela

➤	WHETHER APPROVAL OF COMPETENT AUTHORITY WAS OBTAINED FOR USING A METHOD OTHER THAN OPEN COMPETITIVE BIDDING.	<u>N.A</u>
➤	NUMBER OF BIDS RECEIVED	<u>05 Nos.</u>
➤	WHETHER THE SUCCESSFUL BIDDER WAS LOWEST BIDDER	<u>Yes</u>
➤	WHETHER INTEGRITY PACT WAS SIGNED	<u>Yes</u>

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)
CONTRACT AWARD PROFORMA – II

To Be Filled And Uploaded on PPRA Website In Respect of All Public Contracts of Works, Services & Goods Worth Fifty Million Rupees or More

➤	NUMBER OF BIDDERS PRESENT AT THE TIME OF OPENING OF BIDS	<u>05 (Five)</u>
➤	NAME AND ADDRESS OF THE SUCCESSFUL BIDDER:	<u>M/s Pak Elektron Limited (PEL), 14km, Ferozepur Road, Lahore-54760</u>
➤	RANKING OF SUCCESSFUL BIDDER IN EVALUATION REPORT (i.e. 1 st , 2 nd , 3 rd EVALUATED BID).	<u>1st lowest</u>
➤	NEED ANALYSIS (Why the procurement was necessary?)	<u>The Procurement was necessary for reliable, safe operation & protection of 500KV & 220KV Transmission Lines</u>
➤	IN CASE EXTENSION WAS MADE IN RESPONSE TIME, WHAT WERE THE REASONS (Briefly describe)	<u>N.A</u>
➤	WHETHER NAMES OF THE BIDDERS AND THEIR PRICES WERE READ OUT AT THE TIME OF OPENING OF BIDS	<u>Yes</u>
➤	DATE OF CONTRACT SIGNING (Attach a copy of agreement)	<u>15-09-2022</u>
➤	CONTRACT AWARD PRICE	<u>PKR 100,683,460/-</u>
➤	WHETHER COPY OF EVALUATION REPORT GIVEN TO ALL BIDDERS (Attach copy of the bid evaluation report)	<u>Yes</u>
➤	ANY COMPLAINTS RECEIVED (If yes result thereof)	<u>No</u>
➤	ANY DEVIATION FROM SPECIFICATIONS GIVEN IN THE TENDER NOTICE/DOCUMENTS (If yes give details)	<u>No</u>
➤	DEVIATION FROM QUALIFICATION CRITERIA (If yes give details)	<u>No</u>
➤	SPECIAL CONDITIONS, IF Any (Give Brief Description)	<u>No</u>



PAKISTAN
WATER AND POWER DEVELOPMENT AUTHORITY

TARBELA POWER STATION



CONTRACT AGREEMENT

FOR

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF
NUMERICAL TYPE DISTANCE PROTECTION RELAYS, OVERCURRENT &
EARTH FAULT PROTECTION RELAYS AND CIRCUIT BREAKER FAILURE
PROTECTION RELAYS FOR 550KV & 220KV TRANSMISSION LINES
EMANATING FROM SWITCHYARD

ON

F.C.S. BASIS

CONTRACT NO. C-544 DATED 15/09/2022

OFFICE OF THE CHIEF ENGINEER (POWER)
HYDEL POWER STATION, TARBELA DAM
TEHSIL & DISTRICT : SWABI, KHYBER PAKHTUNKHWA,
PAKISTAN, POST CODE : 23470
PH: +92 938 281180-82
FAX: +92 938 281186
EMAIL : cetarbelapower@gmail.com



CONTRACT AGREEMENT NO. C-544 DATED 15/09/2022

This Agreement made on 15-09-2022 between Chief Engineer (Power), WAPDA, Tarbela Dam (hereinafter called the "**Purchaser**"), of the one part, and M/s Pak Elektron Limited (PEL), 14km, Ferozepur Road, Lahore-54760 (hereinafter called the "**Supplier**") of the other part.

Whereas the Purchaser invited bid for Supply, Installation, Testing and Commissioning of Numerical type Distance Protection Relays (Main-I type SEL 421; Main-II type MICOM P446), Overcurrent & Earth Fault Protection Relays (Type SEL 751) and Circuit Breaker Failure Protection Relays (Type SEL 751) and all other accessories as per Tender requirement for 500KV & 220KV Transmission Lines emanating from Switchyard of Tarbela Power Station on F.C.S. basis against Tender No. OP/ITR-704 opened on 25-01-2022, and has accepted the Bid by the Supplier for the supply/works of these goods in the sum of PKR 100,683,460/- (hereinafter called the Contract Value).

NOW, THE AGREEMENT WITNESSED as follows:

- In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereafter referred to, unless amendments agreed to mutually.
- The Purchaser hereby covenants to pay the Supplier in consideration of the completion of the supply and works the Contract Value at the times and in the manner prescribed by the Contract.
- The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - This office Letter of Acceptance No. OP/ITR/20(52)/357 dated 23-06-2022.
 - Preamble to Conditions of Contract.
 - General Conditions of Contract.
 - Particular Conditions of Contract.
 - Special Provision.
 - Contractor's offer No. Mktg-1477 dated 24-01-2022.
 - Contractor's letter No. Mktg-1649 dated 20-07-2022 alongwith 10% performance guarantee in shape of E-Stamp bearing No. 2208/22/PGT00144P dated 20-07-2022 for PKR 10,068,346/-.
 - Technical Specifications and Scope of Supply/Services (**Annexure-A**).

- In consideration of above, the following is mutually agreed:

1.

SR. NO.	DESCRIPTION AS PER B.O.Q.	Qty	UNIT PRICE (PKR)	TOTAL PRICE (PKR)
Supply				
1	Distance Protection Relay SET-I, type SEL-421, Make SEL(USA) Ordering Code: 04215611XC0X53225XXXX	13	2,065,930.00	26,857,090.00
	Test blocks, Type 4M200, Make : RMS Australia	20	30,500.00	610,000.00
2	Distance Protection Relay Set-II, Type MICOM P446, Make Schneider, Ordering code: P44631SB7M0K48M	13	754,406.00	9,807,278.00
	Test blocks, Type 4M200, Make : RMS Australia	20	30,500.00	610,000.00
3	Over Current/ Over voltage & Earth Fault Relay, Type SEL-751, Make SEL(USA), Ordering Code: 751001G0X2A2A811C10	13	384,500.00	4,998,500.00
	Test blocks, Type 4M200, Make : RMS Australia	10	30,500.00	305,000.00
4	Breaker Failure Protection Relay, Type SEL-751, Make SEL(USA) Ordering Code: 751001G4G2A2AA1BC10	28	491,770.00	13,769,560.00
	Lock out relays, Type LR109, Make : Comelectric (Italy), Ordering Code : LR109AE210 002-5-S077	28	202,540.00	5,671,120.00
	Test blocks, Type 4M200, Make : RMS Australia	24	30,500.00	732,000.00
5	Industrial grade Ethernet Switches, Type SEL-2730M, Make SEL(USA) Ordering Code: 2730M0ARAX1111AAAAX0	5	705,050.00	3,525,250.00
6	Supply of alarm Reset buttons	54	1,150.00	62,100.00
	Auto Re-closer Switch	20	7,350.00	147,000.00
	Miniature circuit breakers	60	10,650.00	639,000.00
	Other accessories for interfacing in existing panel as per tech. specification	L/s	80,000.00	80,000.00
	Cable for control signal 2.5 mm ² (90 meters roll)	50 rolls	7,440.00	372,000.00
	Cable for CT connection of different colours - 4 mm ² (90meters)	30 rolls	11,400.00	342,000.00
7	Metal sheet for proper covering of the existing panel after dismantling the existing relays.	L/s	790,000.00	790,000.00
8	Mobile workstation for setting and configuration of relays as per tech. specs	1	950,000.00	950,000.00
9	Workstation SEL-3555 AND SEL-3355, Make : SEL (USA), Ordering Code : 3555#8GHM & 3355#C4M2 with accessories	1	2,671,950.00	2,671,950.00

SR. NO.	DESCRIPTION AS PER B.O.Q.	Qty	UNIT PRICE (PKR)	TOTAL PRICE (PKR)
10	Software of the relays and SAS software	L/s	2,511,750.00	2,511,750.00
11	Industrial Ethernet Cable cat5e (1000 feet)	05 Roll	74,650.00	373,250.00
12	Optical fiber armored cable as per tech spec. 2000m	L/s	2,162,700.00	2,162,700.00
13	GPS clock- Type SEL-2488, Make SEL (USA), Ordering Code:24880RAX1181AX23X	1	738,450.00	738,450.00
14	Ferrule tube label printer with 02 ribbon (tube for cable 4 mm ² and 2.5 mm ²)	1	400,000.00	400,000.00
15	Spare test block	2	30,500.00	61,000.00
16	Supply of test plug	4	68,900.00	275,600.00
Total :		---	---	79,462,598.00
GST @ 17% (PKR) :		---	---	13,508,641.66
Total (PKR) :		---	---	92,971,239.66
Services				
1	Installation, programming, testing and commissioning of all Relays	L/s	6,650,500.00	6,650,500.00
2	Training (in accordance with Clause SP-7)	L/s	910,500.00	910,500.00
Total (PKR) :		---	---	7,561,000.00
KPRA Sales Tax on Services @ 2% (PKR) :		---	---	151,220.00
Total (PKR) :		---	---	7,712,220.00
Total :		---	---	100,683,459.66
Gross Total (Supply + Services) :		---	---	100,683,459.66

(Pak Rupees One Hundred Million Six Hundred Eighty-three thousand four hundred fifty-nine and sixty-six paise only)

2). TERMS & CONDITIONS

2.1. TERM OF DELIVERY : F.C.S. Tarbela.

2.2. DELIVERY PERIOD : Supply :

132-days from the date of issuance of Contract Agreement.

The extension in delivery period will not be granted to the firm as a routine matter in case of rejection of material.

Site Installation, Testing & Commissioning

105-days after the approval of Shutdown from the concerned Office/NPCC.

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NUMERICAL TYPE DISTANCE PROTECTION RELAYS (MAIN-I TYPE SEL 421; MAIN-II TYPE MICOM P446), OVERCURRENT & EARTH FAULT PROTECTION RELAYS (TYPE SEL 751) AND CIRCUIT BREAKER FAILURE PROTECTION RELAYS (TYPE SEL 751) AND ALL OTHER ACCESSORIES AS PER TENDER REQUIREMENT FOR 500KV & 220KV TRANSMISSION LINES EMANATING FROM SWITCHYARD OF TARBELA POWER STATION ON F.C.S. BASIS.

M. Uday

2.3. NAME OF CONTRACTOR : M/s Pak Elektron Limited (PEL), 14km, Ferozepur Road, Lahore-54760.

2.4. CONSIGNEE : Chief Engineer (Power) Wapda, Tarbela (Pakistan)

2.5. PAYMENT

2.5.1 Supply

You will be entitled to 100% payment amounting to PKR 92,971,239.66 through crossed cheque against successful delivery of the ordered material on production of the following documents:-

- Bill in triplicate supported by sales tax invoice.
- Warranty Certificate.
- Certificate to the effect that the billed amount has not been claimed or received earlier.
- Copy of GST Paid Challan.
- Copy of Sales Tax Return alongwith Annex-C (in case of non-availability of Annex-C, Sales tax amount will be withheld and will be paid upon submission of the same).
- Certificate regarding Active Tax Payer of F.B.R.
- Affidavit that Sales Tax Return covers such GST amount.
- Certificate regarding filer towards Income Tax.
- Inspection Certificate.

2.5.2 Services (Site Installation, Testing & Commissioning).

You will be entitled to 100% payment amounting to PKR 7,712,220.00 through crossed cheque against successful completion of installation, testing and commissioning work on production of the following documents:-

- Bill in triplicate.
- Certificate to the effect that the billed amount has not been claimed or received earlier.
- Work Completion Certificate.

2.6 WARRANTY

You will furnish a warranty certificate for a period of 18-months effective from the date of issuance of Inspection Certificate or 12-months from the date of commissioning and issuance of work completion certificate by end user that the goods conform exactly to, the specifications laid down in your offer and in this contract and that if the goods received are found to be old, or faulty in design or of poor material or inadequate workmanship, you will be held responsible to substitute the un-acceptable goods with the acceptable ones at your risk and cost on CIF basis and that you further agree to accept and abide by the decision of the Authority in all such matters.

2.7 INSPECTION

Inspection of the consignment will be carried out in Power Station Tarbela by our authorized representative on receipt of the material. The decision of inspecting officer will be binding on you. The warranty Clause-2.6 above, will strictly apply in case of rejection if any.

2.8 PACKING

You will be responsible for packing the material suitable for transit by rail/road so as to ensure it being free from loss/damage on arrival at destination. The packing of the material shall be done by you at your expenses, in accordance with the standard specifications.

2.9 RESPONSIBILITY FOR EXECUTING THE CONTRACT

The supplier/firm is entirely responsible for the successful execution of the contract in all respects in accordance with the terms and conditions as specified in the Contract agreement, notwithstanding any approval which the inspector may have given in respect of the stores / material or the test certificate provided by the supplier. If the inspected and accepted goods when received at destination are found defective or not conforming to the specification / particulars given in the purchase order or have deteriorated as a result of defective packing or some other reasons or certain defects which could not be detected at the time of first inspection, are noticed. The purchaser reserves the right to carry out second inspection within 1½ months of the receipt of goods. The findings of the second inspection shall be binding on the Supplier and if as a result of second inspection, the goods are found to be of incorrect quality or quantity or not conforming to specifications / particulars or substandard, the purchaser may exercise any one of the following options and the supplier shall comply with the decision of the purchaser.

- i) To ask the Supplier to replace rejected goods with the acceptable goods at destination at his risk and cost.
- ii) To accept the substandard goods at a reduced price and deduct any amount, if already paid in excess of the reduced price.
- iii) To cancel the contract and make risk purchase. The extra amount, if paid, shall be recovered from the defaulting Supplier but any reduction as a result of risk purchase will not entitle the defaulter to get any advantage.

2.10 TAXES

The total price such as **PKR 100,683,459.66 (Supply + Services)** is inclusive of general sales tax and KPRA sales tax on services at the prevailing rates, payable by you. Other taxes including withholding, income tax/professional tax at the prevailing rate will be deducted at source from the gross amount payable.

2.11 FAILURE AND TERMINATION:

If you fail to deliver the stores or any consignment thereof within the specified delivery period OR fail to complete the installation, testing and commissioning within the specified period, the contracting officer shall be entitled at his option either:

- i). To recover from you the liquidated damages levied at the rate of 0.07% per day or part thereof subject to a maximum of ten percent (10%) of the cost of supply, or cost of services as the case may be, by the Consignee. The liquidated damages shall be recovered only for the material supplied late or not supplied except where un-delivered material held up the use of other material, then it shall be for the total value of the Contract. The recovery of the liquidated damages mentioned above can be affected from any payment due to you from any unit of WAPDA.
OR
- ii). To purchase from elsewhere without notice to the Bidder(s) at their risk and cost, the stores not delivered, without cancelling the Contract in respect of the consignment yet due for delivery.
OR
- iii) To cancel the Contract at the Bidder(s) risk and cost. In the event of action being taken under (ii) or (iii) above, you shall be liable for any loss which the Authority may suffer on the account, but you shall not be entitled to any gain on re-purchase made against the supply order.

M. Nadeem

2.13 TRAINING :

- 2.13.1 You will arrange technical training as per Clause-SP-7 of Bidding Documents for one (01) week for ten (10) Wapda Engineers & technical staff of Tarbela Power Station, to ensure the trouble free operation and maintenance of the offered protection relays, after the commissioning of the transmission line and breaker failure protection system including a good knowledge of the design, operation, fault diagnostic to be supplied under the contract.
- 2.13.2 You will also arrange hands-on practice training at your own vicinity to four (04) Tarbela Engineers for one (01) week in two phases i.e. (02 No's Engineers will attend the training at a time, in phase of 1st week & 2nd week).
- 2.13.3 Cost of travelling will be borne by Wapda. All other charges like boarding, lodging and meal shall be borne by M/s PEL, Lahore, besides daily allowance @ PKR 2,000/- per day per person (including days of travel).
- 2.13.4 You will provide free accommodation at your premises/hotel (not less than 3-Star).
- 2.13.5 The training shall cover, but not limited to, the following areas;
- Offered Relay Architecture.
 - Complete overview of the relay software features.
 - Internal Logic Diagram.
 - Working Principle.
 - Operation.
 - Maintenance.
 - Troubleshooting.
 - Retrieving of the alarms, Events and waveform from the Relay through laptop.
 - Annual Testing Procedure, etc.
 - Configuration, setting of new relay in HMI.
 - SAS software complete configuration, retrieving of alarms and event and disturbance records.
 - Testing of all the relays may be performed from Omicron test set.

2.14 MANUAL AND DRAWINGS

- The drawings should be complete in every aspect and should be complete replacement of the existing relay drawings.
- 02 No. manuals copies of all offered Protection relays.
- 04 Nos copies of A3 size complete drawings of 220kv transmission line. All copies of As built final drawing should be hard binded. (thesis binding)
- 04 Nos copies of A3 size complete drawings of overcurrent and breaker fail protection relay. All copies of As built final drawing should be hard binded.
- 04 Nos copies of A3 size complete drawings of 500kv transmission line protection. All copies of As built final drawing should be hard binded.
- 02 Nos hardcopies of A4 size test report of all protective relays.
- 01-page sheet of all relays front led's/displays for operation section to record the indications/alarms in case of tripping.
- All above said drawings and manuals should be provided in soft form on portable drive of 1TB.

2.16. FORCE MAJEURE :

While terminating the contract (purchase order) for breach of contract or imposing liquidated damages, we being the Purchaser shall give due consideration to the circumstances leading to the breach of contract or delay on which you had no hold, examples of which are :-

- i) act of Almighty Allah or enemy ;



- ii) lockout, strikes ;
- iii) restrictions imposed by the Government in the matter of import/export ;
- iv). restrictions granted by a lawful court restraining you from executing the contract unless such injunction was due to any alleged irregularity committed by you.

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

Name: Mr. Gharib Nawaz
Chief Engineer (Power), Wapda - Tarbela

15/09/2022
Chief Engineer (Power)
Wapda-Tarbela Dam
Mr. Fahad Rafi
Resident Engineer
(Witness)

Name: Mr. Muhammad Nasir Paul
M/s Pak Elektron Limited (PEL)

15/09/2022
(Stamp)
Mr. Uzair Aziz
(Witness)



Endst: No. OP/ITR/20(52)/ 968-74

Dated: 15 / 09 / 2022

Copy of the above is forwarded for information and necessary action to: -

1. The General Manager (Hydel) Wapda, 186-Wapda House, Lahore.
2. The General Manager (Power) Wapda, Tarbela.
3. Addl. CE/R.E. (Protection), Power Station, Tarbela
4. Store Manager (Power), Wapda, Tarbela.
5. Dy. Manager (Accounts & Finance) Wapda, Tarbela.
6. Master File.

TENDER NO. OP/ITR-704 OPENED ON 25-01-2022 : FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NUMERICAL TYPE DISTANCE PROTECTION RELAYS, OVERCURRENT & EARTH FAULT PROTECTION RELAYS AND CIRCUIT BREAKER FAILURE PROTECTION RELAYS FOR 550KV & 220KV TRANSMISSION LINES EMANATING FROM SWITCHYARD OF TARBELA POWER STATION ON F.C.S. BASIS

LIST OF BUYERS

1. M/s Siemens Pakistan, Lahore.
2. M/s Epesol (Pvt.) Limited, Lahore.
3. M/s ETS Solutions, Karachi.
4. M/s CCC Engineering, Lahore.
5. M/s PAK Electron, Lahore.

products to be imported from outside Pakistan.

IB.11 Bid Prices

- 11.1 The bidder shall fill up the Schedule of Prices attached to these documents indicating the unit rates and prices of the Works to be performed under the Contract. Prices on the Schedule of Prices shall be entered keeping in view the instructions contained in the Preamble to the Schedule of Prices.
- 11.2 The bidder shall fill in rates and prices for all items of the Works described in the Schedule of Prices. Items against which no rate or price is entered by a bidder will not be paid for by the Employer when executed and shall be deemed covered by rates and prices for other items in the Schedule of Prices.
- 11.3 The bidder's separation of price components in accordance with Sub-Clause 11.1 above, will be solely for the purpose of facilitating the comparison of bids by the Employer/Engineer and will not in any way limit its right to contract on any of the terms offered.
- 11.4 Unless otherwise stipulated in the Conditions of Contract, prices quoted by the bidder shall remain fixed during the bidder's performance of the Contract and not subject to variation on any account. When the bidders are required to quote only fixed price(s) a bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to Clause IB.24.
- 11.5 Any discount offered shall be valid for at least the period of validity of the bid. A discount valid for lesser period shall be considered null and void.

IB.12 Currencies of Bid

- 12.1 Prices shall be quoted in the following currencies:
 - (a) For Goods and Services which the bidder will supply from within Pakistan, the prices shall be quoted in the Pak. Rupees.
 - (b) For Goods and Services which the bidder will supply from outside Pakistan, the prices shall be quoted either in U.S. Dollars or in any other freely convertible currency.
- 12.2 Further, a bidder expecting to incur a portion of its expenditure in the performance of the Contract in more than one currency (but use no more than 3 foreign currencies), and wishing to be paid accordingly, shall so indicate in its bid.
- 12.3 The currencies of payment shall be as stated in Particular Conditions of Contract. However, provisions in Sub-Clauses 12.1 & 12.2 above, shall not in any way constitute a contractual or legal binding on the Employer for the payment in the currencies required by the Contractor.

IB.13 Documents Establishing Bidder's Eligibility and Qualifications

- 13.1 Pursuant to Clause IB.9, the bidder shall furnish, as part of its bid, documents

establishing the bidder's eligibility to bid and its qualifications to perform the Contract if its bid is accepted.

13.2 The documentary evidence of the bidder's eligibility to bid shall establish to the Employer's satisfaction that the bidder, at the time of submission of its bid is from an eligible source country as defined under Clause IB.2.

13.3 The documentary evidence of the bidder's qualification to perform the Contract if its bid is accepted, shall establish to the Employer's/Engineer's satisfaction:

(a) that, in the case of a bidder offering to supply Goods under the Contract which the bidder did not manufacture or otherwise produce, the bidder has been duly authorized by the Goods manufacturer or producer to supply the Goods to Pakistan;

(b) that the Bidder/Manufacturer has the financial, technical and production capability necessary to perform the Contract; and

(c) that, in the case of a bidder not doing business within Pakistan the bidder is or will be (if successful) represented by an agent in Pakistan equipped and able to carry out the Supplier's maintenance, repair and spare parts stocking obligations prescribed by the Conditions of Contract and/or Technical Provisions.

13.4 (a) Bidder/Manufacturer must possess and provide evidence of the following experience.

i) The offered protection relays must be on approved list of NTDCL

ii) The bidder must have previous experience of retrofitting/replacing the protection relays.

iii) The bidder must have done similar work as stated in point (ii) above on at least one (01) generating stations/substations in Pakistan.

iv) The bidder shall submit details of previous works of similar nature jobs carried out along with documentary evidence, performance certificates and their organization set up for similar works executed in the past ten (10) years. The documentary evidence to be submitted must clearly indicate the names, postal addresses/E-Mails of organizations, order no. and dates where the firm has done such works in the past.

The Bidder shall certify the capacity and capability of the plant (from which Goods are now offered) for manufacturing, quality assurance and testing facilities, qualified man-power and production/delivery of quality materials according to bid specifications and delivery requirements. Besides, such plant should have produced same items for at least ten (10) years and such Goods shall have proven successful in the field for at least three (03) years and the bidder shall submit with the bid all necessary documentation in this regard. The Employer/Engineer will have the right to verify the particulars regarding the plant and other related information furnished with the bid and the joint venture as well as the partners thereof shall be liable for disqualification in the event of any mis-statement/mis-representation on their part.

- 25.1 To facilitate evaluation and comparison, the Employer/Engineer will convert, all Bid Prices expressed in the amount in various currencies in which Bid Price is payable, to Pak. Rupees at the Telegraphic Transfer and Over Draft (TT&OD) composite (selling) exchange rates published/authorised by State Bank of Pakistan and applicable to similar transactions, on the date of the opening of Bids.

IB.26 Detailed Evaluation of Bids

- 26.1 The Employer/Engineer will evaluate and compare only the bids previously determined to be substantially responsive pursuant to Clause IB.24 as per requirements given hereunder.

26.2 Evaluation and Comparison of Bids

- (a) Bids will be evaluated for complete scope of work.
- (b) **Basis of Price Comparison**
The prices will be compared on the basis of the Evaluated Bid Price pursuant to Para (e) herein below.
- (c) **Technical Evaluation**
It will be examined in detail whether the Goods offered by the bidder comply with the Technical Provisions of the Bidding Documents. For this purpose, the bidder's data submitted with the bid will be compared with the specific work data prescribed by the Employer and technical features/criteria of the Goods detailed in the Technical Provisions. Other technical information submitted with the bid regarding the Scope of Work will also be reviewed.
- (d) **Commercial Evaluation**
It will be examined in detail whether the bids comply with the commercial/contractual conditions of the Bidding Documents. It is expected that no major deviation/stipulation shall be taken by the bidders.
- (e) **Evaluated Bid Price**
In evaluating the bids, the Employer will determine for each bid in addition to the Bid Price, the following factors (adjustments) in the manner and to the extent indicated below to determine the Evaluated Bid Price:
 - (i) making any correction for errors pursuant to Sub-Clause 24.2 hereof.
 - (ii) excluding Provisional Sums, if any, but including priced Daywork.
 - (iii) making an appropriate adjustment for any other acceptable variation or deviation.

26.3 Evaluation Methods

Pursuant to Sub-Clause 26.2, Para (e)(iii) following evaluation methods for price adjustments will be followed:

- (a) Price Adjustment for Completeness in Scope of Work
- (b) Price Adjustment for Technical Compliance
- (c) Price Adjustment for Commercial Compliance
- (d) Price Adjustment for Deviations in Terms of Payment
- (e) Price Adjustment for completion Schedule

(i) Price Adjustment for Completeness in Scope of Work

In case of omission in the scope of work of a quoted item no price adjustment for the omitted item(s) shall be applied provided that the Bidder has mentioned in his bid that the same is covered in any other item.

The price adjustment shall not justify any additional payment by the Employer. The price(s) of omitted item(s) shall be deemed covered by other prices of the Schedule of Prices.

(ii) Price Adjustment for Technical Compliance

The cost of making good any deficiency resulting from technical noncompliance will be added to the Corrected Total Bid Price for comparison purposes only. The adjustments will be applied taking the highest price quoted by other Bidders being evaluated in detail in their original Bids for corresponding item. In case of non-availability of price from other Bidders, the price will be estimated by the Engineer.

(iii) Price Adjustment for Commercial Compliance

The cost of making good any deficiency resulting from any quantifiable variations and deviations from the Bid Schedules and Conditions of Contract, as determined by the Engineer will be added to the Corrected Total Bid Price for comparison purpose only. Adjustment for commercial compliance will be based on Corrected Total Bid Prices.

(iv) Price Adjustment for Deviation in Terms of Payment

If a bid deviates from the terms of payment/payment conditions as specified in the Conditions of Contract and if such deviation is considered acceptable to the Employer, mark-up earned for any earlier payments involved in the terms outlined in the Bid as compared to those stipulated in the Conditions of Contract shall be calculated at the following mark-up rates:

- for local currency component: 11% per annum

and shall be added to the Corrected Total Bid Price for comparison purposes only.

(v) Price Adjustment for Completion Schedule

Bids indicating completion in advance of the dates stated in Preamble to Conditions of Contract, no credit will be given in this evaluation.

Bids indicating completion period later than the period set out in Preamble to Conditions of Contract shall be adjusted in the evaluation by adding a factor of 0.05% of the Corrected Total Bid Price for each calendar day of completion later than specified period of the completion.

Bids indicating completion beyond **Ninety (90)** days later than the dates set out in Preamble to Conditions of Contract, shall not be considered and rejected as non-responsive.

- 26.4 If the bid of the successful bidder is seriously unbalanced in relation to the Employer's estimate of the cost of work to be performed under the Contract, the Employer may require the bidder to produce detailed price analyses for any or all items of the Schedule of Prices to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the Performance Security set forth in Clause IB.34 be increased at the expense of the successful bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful bidder under the Contract.

IB.27. Domestic Preference

- 27.1 In the comparison of evaluated Bids, the Goods manufactured in Pakistan, will be granted a margin of preference in accordance with the following procedures, provided the bidder shall have established to the satisfaction of Employer that the manufacturing cost of such Goods includes a domestic value addition equal to at least 20% of the ex-factory Bid price of such Goods. Bidders applying for domestic preference shall fill in Appendix C to these Instructions to substantiate their claim.
- 27.2 The Employer/Engineer will first review the Bids to determine, the Bid group classification in accordance with Sub-Clause 10.2 hereof.
- 27.3 The comparison shall be Ex-factory price of the Goods to be offered from within Pakistan (such prices to include all costs as well as custom duties and taxes paid or payable on raw materials and components incorporated or to be incorporated in the Goods) and the DDP (CIF + Customs duty, sales tax and other import charges) Pakistan seaport price of the Goods to be offered from outside Pakistan.
- 27.4 The lowest evaluated bid of each Group shall first be determined by comparing all evaluated bids in each Group among themselves taking into account:
- (a) In the case of Goods manufactured in Pakistan, sales tax, local body charges and other similar taxes which will be payable on the furnished Goods in Pakistan.
 - (b) In the case of Goods of foreign origin offered from abroad, customs duties, sales tax and other import charges which will be payable on furnished Goods in Pakistan.
 - (c) In the case of Goods of foreign origin already located in Pakistan, customs duty, sales tax and import charges on CIF price as applicable for Sub-Clause 27.4(b) here above.
- 27.5 The price preference to Group A bids will be:
- (i) 15% of the ex-factory bid price, if the value addition through indigenous manufacturing is at least 20%;
 - (ii) 20% of the ex-factory bid price, if the value addition through indigenous manufacturing is over 20% and up to 30%; and
 - (iii) 25% of the ex-factory bid price, if the value addition through indigenous manufacturing is over 30%.

- 27.6 The applicable price preference i.e., as per Sub-Clause 27.5 here above will be applied to Group A Bid by reducing the ex-factory bid price.

IB.28 Process to be Confidential

- 28.1 Subject to Clause 23 heretofore, no Bidder shall contact Employer and/or Engineer on any matter relating to its Bid from the time of the Bid opening to the time the bid evaluation result is announced by the Employer. The evaluation result shall be announced at least ten (10) days prior to award of Contract. The announcement to all bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated.
- 28.2 Any effort by a Bidder to influence Employer and/or Engineer in the Bid evaluation, Bid comparison or Contract Award decisions may result in the rejection of his Bid. Whereas any bidder feeling aggrieved may lodge a written complaint not later than fifteen (15) days after the announcement of the bid evaluation result; however, mere fact of lodging a complaint shall not warrant suspension of the procurement process.

F. AWARD OF CONTRACT

IB.29. Post-Qualification

- 29.1 The Employer, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any defect in supplier's or contractor's capacities, may require the suppliers or contractors to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided that such qualification shall only be laid down after recording reasons therefor in writing. They shall form part of the records of that bid evaluation report.

- 29.2 The determination will take into account the bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the bidder's qualification submitted under Appendix B to Instructions to Bidders "Evidence of Bidder's Capability" by the bidder pursuant to Clause IB.13, as well as such other information as required under the Bidding Documents.
- 29.3 An affirmative determination will be a pre-requisite for award of the Contract to the lowest evaluated bidder. A negative determination will result in rejection of that bidder's bid in which event, Employer will proceed to undertake a similar determination of the next lowest evaluated bidder's capabilities to perform the Contract satisfactorily.

IB.30 Award Criteria

- 30.1 Subject to Clause IB.32, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest evaluated Bid Price, provided that such bidder has been determined to be qualified to satisfactorily perform the Contract in accordance with the provisions of Clause IB.29.

IB.31 Employer's Right to Vary Quantities

- 31.1 Employer reserves the right at the time of award of Contract to increase or decrease by upto 15% the quantity of goods and services specified in the Schedule of Prices without

EVALUATION REPORT TENDER NO. OP/ITR-704
SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF DISTANCE
PROTECTION RELAYS, OVERCURRENT & EARTH FAULT PROTECTION
RELAYS AND CIRCUIT BREAKER FAILURE PROTECTION RELAYS FOR
TARBELA POWER STATION ON F.C.S BASIS

1. INTRODUCTION

Electromechanical and Static Type Distance relays are installed for Protection of 500KV/220KV transmission lines emanating from Tarbela Switchyard. The installed relays are thirty to forty years old and obsolete now. These relays have suffered from the effects of age. As the time passed, the spring and linkage inside the relays have grown weak. This causes the setting values to drift which ultimately result in mal-operation of the relays. The response of these relays is also slow as compared to latest numerical relays. Moreover, these relays are for single function and don't have the features like fault locator and auto Recloser required for the stability of the Power system.

It is further added that testing of all Distance relays along with its Auto Recloser was carried out by NTDC TSG team in Jan,2020. The test report of all relays was submitted to Office of Chief Engineer (Protection and Control), NTDC Lahore. After going through the said report, Office of Chief Engineer (Protection and Control) suggested to replace these old Electromechanical/ static type Protection relays with the latest numerical relays so that the limitations / drawbacks may be rectified.

Therefore, for a larger network like Tarbela, the existing relays are no more reliable and require urgent replacement.

Keeping in view the above, Procurement case was initiated for Supply, Installation, Testing and Commissioning of Distance Protection Relays, Overcurrent & Earth Fault Protection Relays and Circuit Breaker Failure Protection Relays for Tarbela Power Station On F.C.S Basis.

1.1 BASIC DATA OF TENDER

Basic Data covering key information on the tender is given below:

- Project : Tarbela Power Station
- Project Financing : WAPDA-Tarbela
- Tender Title : Supply, Installation, Testing and Commissioning of Distance Protection Relays, Overcurrent & Earth Fault Protection Relays and Circuit Breaker Failure Protection Relays for Tarbela Power Station On F.C.S Basis.
- Tender No. : OP/ITR-704
- Mode of Procurement : FCS
- Date of Notice for invitation of tenders. : 22.10.2021

- Tender closing date and time : 24.01.2022
- Tender opening date and time : 25.01.2022 at 11.30 HRS.
- Number of Bidding documents purchased : Twenty-three (12)
- Number of Bids received : Five (05)
- Bid validity. : 120 days
- Currency of Tender for comparison : Pak. Rupees

2. **SCOPE OF WORK**

The scope of work is as under:

Supply, Installation, Testing and Commissioning of Distance Protection Relays, Overcurrent & Earth Fault Protection Relays and Circuit Breaker Failure Protection Relays for Tarbela Power Station On F.C.S Basis.

3. **TENDER INVITATION, SUBMISSION AND OPENING.**

3.1 **INVITATION FOR TENDERS**

Based on approval obtained from competent authority, open tenders were invited for Supply, Installation, Testing and Commissioning of Numerical Type Distance Protection relays, Overcurrent & Earth fault Protection relays and Circuit Breaker Failure Protection relays for 550KV & 220KV Transmission Lines emanating from Switchyard of Tarbela Power Station **on F.C.S. basis.** Following Twelve (12) firms purchased the Bidding documents.

Sr. No.	Firm name
1.	M/s Glow Pak International, Lahore
2.	M/s Hitachi Energy Pakistan, (Pvt.) Ltd. Lahore
3.	M/s Genesis Technical Consultancy Services , Islamabad
4.	M/s STZ Engineers, Lahore
5.	M/s EPESOL (Pvt.), Ltd., Lahore
6.	M/s PAK Elektron Limited, Lahore
7.	M/s Paras Trading Company, Karachi
8.	M/s Grid Station Pakistan, (Pvt.) Ltd., Karachi
9.	M/s ETC Solutions, Karachi
10.	M/s CCC Engineering, Ltd. Lahore
11.	M/s Siemens Pakistan, Lahore
12.	M/s ETC Solution (Pvt.) Ltd., Lahore

3.2 BID SUBMISSION

Five (05) Bidders submitted their Bids before the closing deadline i.e. 1100Hrs on January 25, 2022. (S.No.5,6,10,11,12)

3.3 BID OPENING

3.3.1 General

Immediately after the closing deadline, the Bids were publicly opened by the Bid opening committee in the presence of representatives of the Bidders in Officers club Tarbela. The name of each Bid, bid price with discount offered if any and amount of Bid security was readout in presence of Bidders. The representative of each Bidder present at the public opening was requested to confirm the read-out price and discount offered if any. Each Bid was found to be accompanied by Bid security.

3.3.2 Readout Prices

The read out prices in respective currencies are given below:

Sr. No.	Firm	Read-out price (F.C.S. Value) Including GST and KPRA Sales Tax		Total
		Supply	Services	
1.	M/s Siemens Pakistan, Lahore	PKR 127,389,958.02	PKR 6,635,100.00	PKR 134,025,058.02
2.	M/s Epesol (Pvt.) Limited, Lahore	PKR 98,058,285.00	PKR 32,094,708.00	PKR 130,152,993
3.	M/s ETC Solutions, Karachi	Foreign Component	Local Component	PKR 291,336,731
		US\$ 1,239,273.00= PKR 219,098,633+ GST 37,246,767.65	PKR 16,634,943.00	
4.	M/s CCC Engineering, Lahore	Foreign Component	Local Component	PKR 146,076,651
		US\$ 564,260.00= PKR 99,758,967.386+GST 16,959,024	--	
5.	M/s PAK Elektron Limited, Lahore	PKR 92,971,239.66	PKR 7,712,220.00	PKR 100,683,459.66

* 1 US\$ = PKR 176.7961, as per State Bank Rate Sheet dated 25-01-2022.

4. BID SECURITY

Sub-clause IB-15.2 of the Bidding documents states that the bid security shall be valid for a period twenty-eight (28) days beyond the bid validity date (120 days). The bid security shall be valid up to 22-06-2022.

The Bid securities provided with Bids have been thoroughly checked. The analysis of Bid securities is tabulated below.

Sr No.	Name of the Bidder	Validity of the Bid security	Required validity	Amount PKR	Remarks
1.	M/s Siemens Pakistan, Lahore	31.07.2022	22-06-2022	3,000,000	Acceptable
2.	M/s Epesol (Pvt.) Limited, Lahore	24.06.2022	22-06-2022	3,000,000	Acceptable

Sr No.	Name of the Bidder	Validity of the Bid security	Required validity	Amount PKR	Remarks
3.	M/s ETC Solutions, Karachi	23.07.2022	22-06-2022	3,000,000	Acceptable
4.	M/s CCCe Engineering, Lahore	15.12.2022	22-06-2022	3,000,000	Acceptable
5.	M/s PAK Elektron Limited, Lahore	30-06-2022	22-06-2022	3,000,000	Acceptable

5. PRELIMINARY EXAMINATION OF BIDS

5.1 GENERAL

As required under Clause IB.24, all the Bids received were examined for substantial responsiveness to all the terms and conditions of the Bidding documents. The result of the examination is summarized in **Table-1**. (Annex-A)

6. WORK COMPLETION PERIOD:

As per sub-clause 1.1.35 of preamble to the conditions of contract, the time for completion is 240 days. The completion time mentioned by the bidders is tabulated below:

Sr No.	Name of the Bidder	Completion Period Required	Completion period of bidder	Remarks
1.	M/s Siemens Pakistan, Lahore	240 days	240 days	Acceptable
2.	M/s Epesol (Pvt.) Limited, Lahore	240 days	240 days	Acceptable
3.	M/s ETC Solutions, Karachi	240 days	420 days	Not Acceptable
4.	M/s CCCe Engineering, Lahore	240 days	200 days	Acceptable
5.	M/s PAK Elektron Limited, Lahore	240 days	237 days	Acceptable

As per clause IB-26.3 (v) of the bidding document, the bids indicating completion period beyond 90 days later than the days set out in the Preamble to conditions of the contract shall not be considered and rejected as **non-responsive**.

*The completion period mentioned by M/s ETC is **180 days** later than the required. The bid of M/s ETC is therefore is rejected as non-responsive and will not be evaluated further.*

7. CONFORMANCE OF THE BIDDERS WITH THE ELIGIBILITY CRITERIA AND EXPERIENCE:

Clause-IB-2 and IB-13.4 of the bidding documents summaries the eligibility and experience required. The status of the bidders is tabulated below:

Sr No.	Name of the Bidder	Status of the bidder
1.	M/s Siemens Pakistan, Lahore	Pass
2.	M/s Epesol (Pvt.) Limited, Lahore	Pass
3.	M/s CCCe Engineering, Lahore	Pass
4.	M/s PAK Elektron Limited, Lahore	Pass

8. COMMERCIAL EVALUATION

8.1. M/S PAK ELEKTON LIMITED LAHORE

- Bid is valid for 120-days from the date of bid submission as per tender documents.
- The total bid price is PKR 100,683,459.66 for complete scope of work.
- The firm has submitted bid security for Pak. Rs. 3,000,000/- dated.15-12-2021 which is valid up to 30-06-2022.
- The bidder has submitted no contractual or technical deviation.
- The work completion period is 237 days.
- The bidder has not mentioned payment terms or any deviation to the WAPDA STANDARD TERMS OF PAYMENTS. A clarification was sent to the bidder (F/B) in which bidder has confirmed that he is agreed with the WAPDA standard terms of payment as per clause 33.1 of the particular condition of the contract as mentioned in the bidding documents.
- The bidders have submitted the signed integrity pact.
- The form of bid has been properly signed and stamped by the authorized person.
- The power of attorney for the person signing the bid has been provided.
- The bidders have submitted the manufacturer's authorization letter.

The bid is, therefore, considered as commercially responsive.

8.2 M/S EPESOL, LAHORE

- Bid is valid for 120-days from the date of bid submission as per tender documents.
- The total bid price is PKR 130,152,993 for complete scope of work.
- The firm has submitted bid security for Pak. Rs. 3,000,000/- dated.19-01-2022 which is valid up to 24-06-2022.
- The bidder has submitted no contractual or technical deviation.
- The work completion period is 237 days.

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- The bidder is agreed to the WAPDA standard payment terms as per clause 33.1 of the particular condition of the contract as mentioned in the bidding documents.
 - The bidders have submitted the signed integrity pact.
 - The form of bid has been properly signed and stamped by the authorized person.
 - The power of attorney for the person signing the bid has been provided.
 - The bidder has attached the authorization letter of the manufacturer.

The bid is, therefore, considered as commercially responsive.

8.3 M/S SIEMENS, KARACHI

- Bid is valid for 120-days from the date of bid submission as per tender documents.
- The total bid price is PKR 134,419,133 for complete scope of work.
- The firm has submitted bid security for 3,000,000/- dated.11-01-2022 which is valid up to 31-07-2022.
- The bidder has submitted no contractual or technical deviation.
- The work completion period is 240 days.
- The bidder has not mentioned payment terms or any deviation to the WAPDA STANDARD TERMS OF PAYMENTS.
- The bidders have not submitted the signed integrity pact.
- The form of bid has been signed by Mr. Naveed Rasheed and Ahmad Siddiqui with no power of attorney.
- The bidder has attached the authorization letter of the manufacturer.

The bid is, therefore, considered as partially commercially responsive.

8.4 M/S CCC ENGINEERING LIMITED

- Bid is valid for 120-days from the date of bid submission as per tender documents.
- The total bid price is 564,185 USD and PKR 29,358,660 for the total scope of work.
- The firm has submitted bid security for 3,000,000/- dated.16-12-2021 which is valid up to 15-12-2022.
- The work completion period is 200 days.
- The bidder has submitted no contractual or technical deviation.

- The bidders have submitted the signed integrity pact.
- The form of bid has been properly signed and stamped by the authorized person.
- The power of attorney for the person signing the bid has been provided.
- The bidder has attached the authorization letter of the manufacturer.
- The bidder has not mentioned payment terms or any deviation to the WAPDA STANDARD TERMS OF PAYMENTS. A clarification was send to the bidder in which bidder has confirmed that he is agreed with the WAPDA standard terms of payment as per clause 33.1 of the particular condition of the contract as mentioned in the bidding documents.

The bid is, therefore, considered as commercially responsive.

9. **TECHNICAL EVALUATION**

A detailed checking of the offered relays i.e Distance Relay Main-1 and Main-2, Breaker failure and Overcurrent relays was carried out and compared with the Technical Provisions of the Bidding Documents submitted by all bidders is as under:

9.1 **COMMENTS ON TECHNICAL PROPOSAL OF M/S PAK ELEKTON LIMITED**

The bid of M/s PEL was thoroughly scrutinized by the Evaluation Committee and the detail of the offered relays is as under:

Description	Offered Relay	Aux-supply	No. of inputs	No. of output	CT input	PT input
Main-1 Distance	Make: Schweitzer Engineering Lab. Type: SEL 421-5 Origin: USA Ordering Code: 04215611XC0X53225XXXX	125-250 vdc 110-240AC	15	23	1A	0-300V
MAIN-2 DISTANCE	Make: SCHNEIDER Type: P446 Origin: UK Ordering Code: P44631SB7MOK48M	230VDC	24	32	1 & 5	100-120V
BREAKER FAILURE	Make: Schweitzer Engineering Lab. Type: SEL 751 Origin: USA Ordering Code: 751001G0X2A2A811C10	230VDC	16	19	1A	NA
OVERCURRENT	Make: Schweitzer Engineering Lab. Type: SEL-751 Origin: USA Ordering Code: 751001G4G2A2AA1BC10	230VDC	16	19	1A	NA

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The bidder has offered SEL-421 for Main-1 Distance Protection. Total number of binary input, output, CT input, PT input of the said relay fulfills all the requirement laid in the tender documents. Bidder has offered Schneider Micom P-443 distance protection relay for Set-2. Micom P443 relay fulfills all the requirement laid in the tender documents except the Dual breaker control function which will be used in auto-recloser scheme. Bidder was asked to comment on the said point via clarification (Annex-A). The bidder agreed to replace the relay model with Micom P-446 to meet the all the requirement of the tender documents for Main-02 distance protection without any additional cost. The bidder has offered Sel-751 for Breaker Failure Protection and overcurrent protection. Both type of relays fulfills the specification laid down in the tender documents. All the offered relays are NTDC approved. Therefore, the proposal of M/s PAK ELEKTON LIMITED, Lahore declared as **Technically responsive**.

9.2. COMMENTS ON TECHNICAL PROPOSAL OF M/S EPESOL

The bid of M/s EPESOL, Lahore was thoroughly scrutinized by the Evaluation Committee and the detail is as under:

Description	Offered Relay	Aux-supply	No. of inputs	No. of output	CT input	PT input
Main-1 Distance	Make: G.E Type: Micom-P446 Origin: UK Ordering Code: G.E P44691RB6S0820M	125-250 Vdc	24	32	1A/5A	100-120 VAC
MAIN-2 DISTANCE	Make: G.E Type: D60 Origin: USA Ordering Code: D60 UG3 HKH F8L H6C M6C U6D WXX	125-250 Vdc	16	24	1A/5A	25-240VAC
BREAKER FAILURE	Make: G.E Type: Micom-P841 Origin: UK Ordering Code: P84193TC7S0790M	220vDC	24	32	1	NA
OVERCURRENT	Make: G.E Type: Micom-P143 Origin: UK Ordering Code: P14391RD7S0910P	220vDC	16	22	1	NA

Bidder has offered Micom-P443 distance protection relay for Set-1. Micom-P443 relay fulfills all the requirement laid in the tender documents except the Dual breaker control function which is used in auto-recloser. Bidder was asked to comment on the said point via

clarification (Annex-B). The bidder agreed to replace the relay model with Micom P-446 without any additional cost to meet the all requirements of the bidding documents for Main-02 distance protection. The bidder has offered D60 for Main-02 distance protection which fulfills all the requirement laid in the bidding documents. The bidder has offered Micom P841 for breaker failure protection and Micom P143 for overcurrent protection. All relays are NTDC approved and fulfills all the requirements and specifications as laid down in the bidding documents. Therefore, the proposal of M/s EPESOL, LAHORE declared as **Technically responsive**.

9.3 COMMENTS ON TECHNICAL PROPOSAL OF M/S Siemens

The bid of M/s Siemens was thoroughly scrutinized by the Evaluation Committee and the detail is as under:

Description	Offered Relay	Aux-supply	No. of inputs	No. of output	CT input	PT input
Main-1 Distance	Make: Siemens Type: NUMERICAL SIPROTEC-5 Origin: Germany Ordering Code: 7SA87(P1A420709)	220vDc	15	20	1A	120v
MAIN-2 DISTANCE	Make: Schweitzer Engineering Lab. Type: SEL 421 Origin: USA Ordering Code: 04215611XC2X5361X1XXX	220vdc	16	26	1A	120v
BREAKER FAILURE	Make: SIEMENS Type: NUMERICAL Origin: GERMANY Ordering Code: 7SJ85 (P1J274696)	220vdc	23	25	1 or 5 A	NA
OVERCURRENT	Make: SIEMENS Type: NUMERICAL SIPROTEC-5 Origin: GERMANY Ordering Code: 7VK87(P1D24213)	220vdc	13	21	1A	NA

The bidder has offered SIPROTEC for Main-1 distance protection and SEL-421 for Main-02 distance protection. Both type of these relays fulfills the technical requirement as laid in the bidding documents. Bidder has offered the Siprotec-5 for breaker failure protection and overcurrent protection. All offered relays are NTDC approved and fulfills the technical requirement and specifications as laid down in the bidding documents. Therefore, the proposal of M/s Siemens, Karachi declared as **Technically responsive**.

9.4. **COMMENTS ON TECHNICAL PROPOSAL OF M/S CCCE ENGINEERING, LAHORE**

The bid of M/s CCCE Engineering, Lahore was thoroughly scrutinized by the Evaluation Committee and the detail is as under:

Description	Offered Relay	Aux-supply	No. of inputs	No. of output	CT input	PT input
Main-1 Distance	Make: G.E Type: MICOM-P446 Origin: U.K Ordering Code: G.E: P44691RB7S0790M	24-250dc	24	32	1/5A	100-120V
MAIN-2 DISTANCE	Make: G.E Type: UR D60 Origin: USA OR CA Ordering Code: D60-WC5-HKH-F8L-H6D-M8L-P6C-U6C-W6C	24-250DC	16	24	1/5A	100-120V
BREAKER FAILURE	Make: G.E, Type: Micom-P143 Origin: U.K Ordering Code: P14391RD7S0910P	230VDC	16	22	1A	NA
OVERCURRENT	Make: G.E Type: Micom-P143 Origin: U.K Ordering Code: P14391RD7S091P	230VDC	16	22	1A	NA

The bidder has offered MICOM-P446 for Main-1 distance protection and D60 for Main-02 distance protection. Both types of offered relays are NTDC approved and fulfills all the requirement and specification as laid down in the bidding documents. Bidder has offered MICOM-P143 for breaker failure protection and overcurrent protection. Micom P-143 is also NTDC approved and fulfills all the requirement and specification as laid down in the bidding documents. Therefore, the proposal of M/s CCCE Engineering, Lahore declared as **Technically responsive**.

The technical and commercial position of the bidders is summarized below:

Sr No.	Name of the Bidder	Technical Responsiveness	Commercial responsiveness
1.	M/s Siemens Pakistan, Lahore	Responsive	Partially Responsive
2.	M/s Epesol (Pvt.) Limited, Lahore	Responsive	Responsive
3.	M/s ETC Solutions, Karachi	Responsive	Responsive
4.	M/s CCCe Engineering, Lahore	Responsive	Responsive
5.	M/s PAK Elektron Limited, Lahore	Responsive	Responsive

10. **FINANCIAL EVALUATION**

The financial comparison of the bidders is as under:

Sr. No.	Bidders	Price in PKR (Million)	Discount (Million)	Loading on account of Custom duty (10%)	Total Evaluated price PKR (Million)	Financial Ranking
1.	M/s Pak Elektron, Lahore	100.683	NIL	-	100.683	1 st lowest
2.	M/s Epesol (Pvt.) Limited, Lahore	130.153	NIL	-	130.153	2 nd
3.	M/s Siemens Pakistan, Lahore	134.025	NIL	-	134.025	3 rd
4.	M/s CCC Engineering, Lahore	146,076	3%=4.38 Total=141.696	14.1696	155.865	4 th

Based on the above comparison, the bid of M/s PAK ELEKTON LIMITED, Lahore for Supply, Installation, Testing and Commissioning of Distance Protection Relays, Overcurrent & Earth Fault Protection Relays and Circuit Breaker Failure Protection Relays for Tarbela Power Station On F.C.S Basis is the **1st lowest**.

11. **CONCLUSION:**

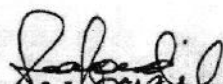
- It is concluded that M/s PAK ELEKTON LIMITED, Lahore is the lowest technically evaluated and commercially responsive bidder.
- The total bid price of M/s PAK ELEKTON LIMITED, Lahore is PKR 100,683,459.66 for complete scope of work.
- The bidder has offered all the required items and trainings in accordance with the requirements of the Bidding Documents.


12. **RECOMMENDATION:**

The committee recommends that contract for Supply, Installation, Testing and Commissioning of Distance Protection Relays, Overcurrent & Earth Fault Protection Relays and Circuit Breaker Failure Protection Relays for Tarbela Power Station On F.C.S Basis may be awarded to **M/s PAK ELEKTON LIMITED, Lahore** with complete scope of work as mentioned below for a total price of **PKR 100.683 Million**.

SR. NO.	DESCRIPTION	QTY REQ.	UNIT PRICE (PKR)	TOTAL PRICE (PKR)
SUPPLY				
1.	DISTANCE RELAY MAIN-I TYPE SEL 421	13	2,065,930	27,467,090
	Test Blocks	20	30,500	
2.	DISTANCE RELAY MAIN-II TYPE MICOM P446	13	754,406	10,417,278
	Test Blocks	20	30,500	
3.	Over Current & Earth Fault Relay TYPE SEL-751	13	384,500	5,303,500
	Test Block	10	30,500	
4.	220KV Breaker Failure Protection Relays TYPE SEL 751	28	491,770	20,172,680
	Lock out relays	28	202,540	
	Test Block	24	30,500	
5.	Industrial grade Ethernet Switches (24 port)	5	705,050	3,525,250

SR. NO.	DESCRIPTION	QTY REQ.	UNIT PRICE (PKR)	TOTAL PRICE (PKR)
6.	Supply of alarm Reset buttons	54	1,150	1,642,100
	Auto Re-closer Switch	20	7,350	
	Miniature circuit breakers	60	10,650	
	Other accessories for interfacing in existing panel	L/s	80,000	
	Cable for control signal 2.5 mm ² (90 meters roll)	50 rolls	7,440	
	Cable for CT connection-4 mm ² (R,Y,BI, Bk color)	30 rolls	11,400	
7.	Metal sheet for proper covering of the existing panel after dismantling the existing relays.	L/s	790,000	790,000
8.	Mobile workstation	1	950,000	950,000
9.	Workstation for the SAS software as per tech. specs	1	2,671,950	2,671,950
10.	Software of the relays and SAS software	L/s	2,511,750	2,511,750
11.	Industrial Ethernet Cable cat5e (1000 feet)	05 Roll	74,650	373,250
12.	Optical fiber armored cable as per tech spec. 2000m	L/s	2,162,700	2,162,700
13.	GPS clock for time synch. of above relays	01	738,450	738,450
14.	Ferrule tube label printer with 02 ribbon (tube for cable 4 mm ² and 2.5 mm ²)	01	400,00	400,00
15.	Spare test block	02	30,500	61,000
16.	Supply of test plug	04	68,900	275,600
Total :				79,462,598
GST @ 17% :				13,508,641.66
Sub Total (A)				92,971,239.66
Services				
1.	Installation, programming, testing and commissioning of all Relays	L/s	6,650,500	6,650,500
2.	Training (in accordance with Clause SP-7)	L/s	910,500	910,500
Total (B) :				7,561,000
KPK Sales Tax on Services @ 2% :				151,220
Sub- Total (B) :				7,712,220
Grand Total (A + B):				100,683,459.66


Prot. & Inst. Engineer-I
Tarbela Power Station
(Member)


Prot. & Inst. Engineer-II
Tarbela Power Station
(Member)


Dy. Manager (A & F)
Tarbela Power Station
(Member)

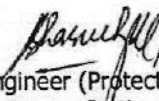

Resident Engineer (Protection)
Tarbela Power Station
(Convener)

Table-01

Clause No.	Bidding Documents Clause	M/s Siemens Pakistan, Lahore	M/s Epesol (Pvt.) Lahore	M/s ETC Solutions, Karachi	M/s CCC Engineering Limited, Lahore	M/s PAK Elektron Limited, Lahore
IB.24 (i)	The Bid is complete and does not deviate from the scope	Yes	Yes	Yes	Yes	Yes
IB.24 (ii)	Any computational errors have been made,	No	No	No	No	No
IB.24(iii)	Required sureties have been furnished	Yes	Yes	Yes	Yes	Yes
IB.24(iv)	The documents have been properly signed,	Yes	Yes	Yes	Yes	Yes
IB.24(v)	The Bid is valid till required period.	Yes	Yes	Yes	Yes	Yes
IB.24(vi)	The Bid prices are firm during currency of contract if it is a fixed price bid.	Yes	Yes	Yes	Yes	Yes
IB.24(vii)	Completion period offered is within specified limits.	Yes	Yes	NO¹	Yes	Yes
IB.24(viii)	The Bidder/ Manufacturer is eligible to Bid and possesses the requisite experience.	Yes	Yes	Yes	Yes	Yes
IB.24(ix)	The Bid does not deviate from basic technical requirements	Yes	Yes	Yes	Yes	Yes
IB.24(x)	The Bids are generally in order	Yes	Yes	Yes	Yes	Yes
IB 13.4 (i)	The offered protection relays must be on approved list of NTDCL	Yes	Yes	Yes	Yes	Yes
IB 13.4 (ii)	The bidder must have previous experience of retrofitting/replacing the protection relays.	Yes	Yes	Yes	Yes	Yes
IB 13.4 (iii)	The bidder must have done similar work as stated in point (ii) above on at least one (01) generating stations/substations in Pakistan.	Yes	Yes	Yes	Yes	Yes
IB 13.4 (iv)	Documentary evidence of previous work	Yes	Yes	Yes	Yes	Yes

1. The completion time quoted by M/s ETC is 180 days beyond the completion date mentioned in the bidding documents and is violation of clause IB 26.3 (v) of the bidding documents.