



MASTER SET OF TENDER DOCUMENT

**TENDER ENQUIRY NO:
T.E-10006612-112-KNR-2023**

**“Hiring of Engineering Services for Detailed Review of Electrical Power System
Protection Coordination, ARC Flash Analysis, Design Bottlenecks and Reliability
Enhancement at KPD TAY Plant”**

**Incharge Electrical Section
Kunnar/KPD-TAY Oil Field & LPG Plant**

C/O TCS Office Tando Jam Hyderabad Sindh –Pakistan
Oil & Gas Development Company Limited.
Phone No. Direct: 92-22-2720748
Fax No. 022-2720749
E-mail: kunnar@ogdcl.com, icelectrical_kunnar@ogdcl.com

Amount of Bid Bond: PKR 60,000/-

BID SUBMISSION DUE DATE: 13-03-2023/ 11:00 AM

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ANNEXURE: The Tender Document comprises of the following Annexures:

SR #	SUBJECT	ANNEXURE
1	SCHEDULE OF REQUIREMENT (Attached)	A
2	BIDDING FORM (TECHNICAL BID)	B
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11	SPECIMEN OF FAIR PRICE CERTIFICATE	K
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**OIL & GAS DEVELOPMENT COMPANY LTD
SUPPLY CHAIN MANAGEMENT DEPARTMENT
(LOCAL PROCUREMENT)**



INTRODUCTION:

Oil & Gas Development Company Ltd having its General Sales Tax No. **07-02-2802-001-55** and National Tax No. **0787223-2** (hereinafter referred to as the Purchaser) invites sealed bids from eligible bidder(s) under one of the following bidding procedures as per PPRA rules which shall be intimated in Press Tender Notice or Invitation letters:

- i. Single Stage One Envelope Bidding Procedure.
- ii. Single Stage Two Envelope Bidding Procedure.
- iii. Two Stage Bidding Procedure.
- iv. Two Stage Two Envelope Bidding Procedure.

Technical and Financial Bids in separate sealed envelopes for supply and delivery of goods, materials, equipment and/or services described in the Schedule of Requirement as Annexure "A" hereof. All the Annexures from "A" to "N" are integral part of the Tender Document and its compliance is required by all the prospective bidder(s).

1. INSTRUCTIONS TO BIDDER(S):

- 1.1. The bidder(s) shall bear all cost associated with the preparation and delivery of their bids, and the Purchaser will in no case be responsible or liable for those costs.
- 1.2. In case of any doubt as to the meaning of any portion of the Specifications or other Terms and Conditions, bidder(s) may seek clarification of the same in writing, but not later than two weeks prior to deadline for submission of bid(s) prescribed by the Purchaser.
- 1.3. At any time prior to the deadline for submission of bids, a modification in bidding document in the form of an addendum can be issued in response to a clarification requested by a respective bidder(s) or even whenever the Purchaser considers it beneficial to issue such a clarification and/or amendment to all bidder(s). The clarification/amendment issued (in general) shall be placed on the OGDCL web site for the intimation to all the prospective bidder(s).
- 1.4. Bidder(s) are required to submit their bid(s), which will bear words "CONFIDENTIAL" and **T.E-10006612-112-KNR-2023 "Hiring of Engineering Services for Detailed Review of Electrical Power System Protection Coordination, ARC Flash Analysis, Design Bottlenecks and Reliability Enhancement at KPD TAY Plant"** as per Tender Notice/SOW(Attachment Annexure-A).
- 1.5. The Purchaser will not take any responsibility for collecting the bids from any Agency.
- 1.6. The Purchaser reserves the right to increase or decrease the quantities or may cancel any or all items shown in the Schedule of Requirement without assigning any reason thereof.
- 1.7. The Purchaser reserves the right to have the items inspected by its own representative, or by 3rd party at its own cost (if required).
- 1.8. It must be indicated in the offer that the quotation fully conforms to Technical Specifications and Terms and Conditions of the Tender.

- 1.9. The Purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all the bids at any time prior to award of Purchase Order without thereby incurring any liability to the affected bidder(s) or any obligation there under. However, OGDCL shall upon request communicate to any bidder(s) who submitted a bid, the grounds for its rejection, but it is not required to justify those grounds.
- 1.10. Unsolicited advice/clarifications and personal approaches by the bidder(s) at any stage of evaluation are strictly prohibited and shall lead to disqualification.
- 1.11. In the event that the bidder(s) submits an alternative bid(s) whether in whole or against any of the items, a group or sub-group in addition to its Main Bid, the bids must be marked as "Main Bid" and "Alternative Bid". Alternative bid(s) which do not conform to the specifications, but meet the performance prescribed in, or the objectives of, the specifications may be submitted. However, only the Alternative Bid of the bidder(s) whose Main Bid is the lowest evaluated bid will be considered.
- 1.12. A bidder, who wishes to have its Alternative Bid(s) considered on an equal basis with all other (Main) Bids, must submit a Bid Bond/Bid Security for each Alternative Bids, an Alternative Bid must be submitted in a sealed envelope clearly marked "Alternative Bid", separate from the Main Bid.
- 1.13. The bidder(s) are expected to examine all instructions, forms, terms and specifications in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or submission of a bid not substantially responsive to Bidding Documents in all respect will result in the rejection of the bid(s).
- 1.14. All prospective bidder(s) are advised to read carefully all terms & conditions mentioned in the Tender Documents prior to filling / submission of their quotation.
- 1.15. Black listing procedure of the Company is attached as Appendix-1. The bidders, contractors, suppliers, agents, consultants, partnership or firms shall be dealt accordingly.
- 1.16. Bank Guarantees as Bid Security/Bid Bond/Earnest Money/Performance Bond/Advance Payment must be submitted in accordance with the format of the Tender Document.
- 1.17. Bid Bond/Bid Security/Earnest Money/Performance Bond/Advance Payment Bank Guarantee will not be acceptable with the banks whose market price per share is quoted below the Par Value at Stock Exchange. Crossed Cheque/Insurance Guarantee/Swift Message will also be not accepted.

2. BID PRICES:

- 2.1. Firm bid prices shall be quoted in Annexure-A duly filled-in, stamped and signed by authorized representative of Bidder(s). Prices must be quoted as per format of Schedule of Requirement (SOR).
- 2.2. Bidding Forms and Bid Summery Sheets from Annexure – "B" to "E" and "J" to "N" must also be duly filled-in, stamped and signed by authorized representative of bidder(s).
- 2.3. Prices must be quoted in Pakistani currency inclusive of all taxes and duties, indicating unit price and total bid prices. GST must be quoted separately along with copy of GST Certificate. Bids offering prices in foreign currency will be rejected. Conditional bid / bid having any price adjustment formula will be rejected.
- 2.4. Prices must be quoted including all charges like handling, loading, transportation and unloading, Octroi and Zila Tax etc. for delivery of material at Purchaser's stores located at **OGDCL KUNNAR/KPD-TAY OIL FIELD & LPG PLANT.**
- 2.5. Quoted prices shall be valid for the period mentioned in Annexure A from the opening date of the Technical Bid.
- 2.6. Technical brochure/literature confirming Size, Brand & Country of Origin of quoted items/material must be attached with the Technical Bid (where deemed necessary).

- 2.7. Any quotation not confirming to Clause 2.1 to 2.6 shall be rejected without any right of appeal.
- 2.8. OGDCL is entitled to avail concessionary rate of duty (5%) under the provision of S.R.O 678(I)/2004 for the material that are not manufactured locally. Bidders are advised to use this concessionary rate of duty and quote their most competitive prices observing laid down conditions of S.R.O 678(I)/2004. OGDCL will issue a letter to Custom Authorities to facilitate clearance of consignment by the successful bidder(s).
- 2.9. Discount (if any) shall only be entertained on Schedule of Requirement of Bidding Document (Financial Proposal). If the discount is mentioned elsewhere in the bid, the same shall not be entertained.
- 2.10. Bidder(s) who disclose quoted prices anywhere in the Technical Bid, under "Single Stage Two Envelop" and "Two Stage Two Envelope" bidding procedures, their bid shall be rejected.

3. BID SECURITY/ BID BOND:

- 3.1. The bidder(s) shall furnish, as part of his bid, a Bank Draft/Call Deposit/Pay order/ Bank Guarantee (As per Annexure-F), in line with Instruction to Bidder Clause No.1.17, in favor of Purchaser as per amount mentioned in Tender Notice/SOR as Bid Security/ Bid Bond/Earnest Money with Technical Bid (No exemption of Bid Bond is allowed as per PPRa Rule 2004 whether the Bidder is from Public or Private Sector). Any Bid not accompanied by Bid Security/ Bid Bond/Earnest Money with Technical Bid shall be rejected without any right of appeal.
- 3.2. Short Bid Security/ Bid Bond/Earnest Money will not be accepted.
- 3.3. The Bid Security/Bid Bond/Earnest Money shall be returned as per following manner:
 - 3.3.1 The Bid Security/ Bid Bond/Earnest Money of bidder(s) whose bid is rejected under Clause 2.7 will be returned forth-with.
 - 3.3.2 The Bid Security/ Bid Bond/ Earnest Money of Technically Non Responsive Bidder(s) shall be returned after the financial bid opening or 15 days after placement of Technical Evaluation Report on the website.
 - 3.3.3 The Bid Security/ Bid Bond/ Earnest Money of the unsuccessful/financially higher bidder(s) will be returned after issuance of the Letter of Intent.
 - 3.3.4 The Bid Security/ Bid Bond/ Earnest Money of the lowest evaluated bidder(s) will be returned after authenticity/realization of Amount of Performance Bond.
 - 3.3.5 The Bid Security/ Bid Bond/ Earnest Money of the lowest evaluated Supplier/Contractor where Performance Bond is not required shall be returned after complete delivery and inspection of the material/services.
- 3.4. The Bid Security/ Bid Bond shall be forfeited/confiscated if they:
 - 3.4.1 Withdraw their bid during the period of bid validity. OR
 - 3.4.2 Fails to provide Performance and/or Advance Bank Guarantees. OR
 - 3.4.3 Submit Forged document in support of their bid. OR
 - 3.4.4 Fails to supply the short/wrong shipped items. OR
 - 3.4.5 Any other reason warranting the confiscation of the Guarantee. OR
 - 3.4.6 Fails to execute Purchase Order and/or Contract in accordance with the tender document. OR
 - 3.4.7 In case of any loss or damage suffered by the Purchaser due to any of the aforementioned act of the bidder(s) is more than the Liquidated Damages, the Purchaser will be entitled to mitigate/recover the losses through encashment of Bid Securities/ Bank Guarantee(s)/Earnest Money(s) or forfeiture of Security furnished by the bidder in other procurement cases.

4. SEALING AND MARKING OF BIDS:

- 4.1. The bidder(s) shall furnish Technical & Financial Bid(s) in two separate sealed envelopes.
- 4.2. Technical Bids will be opened first.

- 4.3. Bid Security/ Bid Bond as mentioned in Press Tender Notice/SOR must be enclosed with Technical Bid.
- 4.4. Only Financial Bid(s) of Technically responsive bidder(s) will be opened publicly.
- 4.5. Financial Bids of technically non responsive bidder(s) will be returned after award of Local Purchase Order to successful bidder(s).
- 4.6. The bid(s) shall be submitted in a sealed envelope marked as under:

Incharge Electrical Section
Kunnar/KPD-TAY Oil Field & LPG Plant
C/O TCS Office Tando Jam Hyderabad Sindh –Pakistan
Oil & Gas Development Company Limited.
Phone No. Direct: 92-22-2720748
Fax No. 022-2720749

E-mail: kunnar@ogdcl.com, icelectrical_kunnar@ogdcl.com

- 4.7. The envelope shall also bear the word “**CONFIDENTIAL**” and following identifications:
T.E-10006612-112-KNR-2023 “Hiring of Engineering Services for Detailed Review of Electrical Power System Protection Coordination, ARC Flash Analysis, Design Bottlenecks and Reliability Enhancement at KPD TAY Plant”

DON'T OPEN BEFORE (AS PER SCHEDULE MENTIONED IN THE TENDER NOTICE/SOR)

TECHNICAL/FINANCIAL BID(s) (INDICATE ONE ON EACH ENVELOPE)

- 4.8. If the envelope is not marked, as instructed above, the Purchaser will assume no responsibility for the misplacement or premature opening of bid(s).

5. DEADLINE FOR SUBMISSION OF BIDS:

- 5.1. The bids must be delivered at the KUNNAR/KPD-TAY OIL FIELD & LPG PLANT on or before as per schedule mentioned in Web Tender Notice/SOR and the same will be opened accordingly.

6. LATE BIDS:

- 6.1. Any bid received by the Purchaser after the prescribed deadline for submission of bids mentioned in Web Tender Notice/SOR will not be accepted and returned un- opened to the bidder(s).

7. BID OPENING:

- 7.1. The purchaser will open the Technical Bid, in the presence of bidder’s representative(s) who may choose to attend on date, time and location mentioned above.
- 7.2. The bidder(s) names, bid prices including bid price modification and bid withdrawals, if any, will be announced at the time of financial bid opening.
- 7.3. The Purchaser will examine the bids to determine whether they are complete, no computational errors have been made, the required sureties have been furnished, documents have been properly signed, and the bids are generally in order.
- 7.4. Arithmetical errors found will be corrected as follows:
 - 7.4.1. Where there is a discrepancy between amount in figures and word, the amount in word will prevail.
 - 7.4.2. Where there is a discrepancy between the unit price and the total amount derive from the multiplication of the unit price and the quantity, the unit price as quoted will govern, unless there is an obvious gross arithmetical error in unit price, in which event, the extended amount quoted would prevail.
 - 7.4.3. In case the due date of bids opening falls on a holiday, the bids shall be opened on the next working day.

8. DETERMINATION OF RESPONSIVENESS:

- 8.1. After opening of the bids, the purchaser will determine whether each bid is substantially responsive to the requirements of the bidding documents.
- 8.2. For the purpose of this clause, a substantially responsive bid is one, which conforms to all the terms and conditions of the bidding documents without material deviation. A material deviation is one which means in-consistent with the bidding document, affects in any substantial way the scope, quality or prescribed delivery schedule or which limits in any substantial way, the Purchaser's right or the bidder's obligation under the contract.
- 8.3. A bid determined to be a non-responsive will be rejected by the purchaser and shall not subsequently be made responsive by the bidder(s) by correction of the non- conformity.
- 8.4. The purchaser may waive any minor deviation non-conformity or irregularity in a bid, which does not constitute a material deviation, provided that the waiver does not prejudice or affect the relative standing order of other bidder(s).
- 8.5. To assist in determining a bid's responsiveness the bidder(s) may be asked for a clarification of his bid. The bidder(s) is not permitted, however, to change bid price or substance of his bid.
- 8.6. The bidder(s) may lodge a written complaint for redressed of their grievances and disputes to Dispute Resolution Committee within fifteen days of the placement of the Technical Evaluation report on the web.

9. ISSUANCE OF LOCAL PURCHASE ORDER (LPO):

- 9.1. The Purchaser will issue Purchase Order to the successful bidder(s) whose bid is determined to be technically responsive and financially lowest evaluated.
- 9.2. Purchase Order and its General Terms & Conditions is available at Annexure-G.

10. PERFORMANCE BOND:

- 10.1. The successful bidder(s) will have to submit a Performance Bond in the shape of either Bank Guarantee (as per format attached at Annexure-H) or CDR or Pay Order/Demand Draft equal to 10% of total value of Purchase Order and/or Contract exclusive of GST/PST/ICT, in line with ITB Clause No.1.17, within fifteen days after issuance of Letter of intent. However, Performance Bond will not be required in cases of Proprietary, single source and for spares/ consumables only upto Rs.5 Million.
- 10.2. In case the successful bidder(s) fails to furnish Performance Bond as per Clause # 10.1, the firm shall be debarred from participation in any future tender of the purchaser in addition to the action taken against such bidder(s) as per clause 3.4.
- 10.3. The Purchaser reserves the right to check the authenticity of Performance Bond from the concerned Bank.
- 10.4. The Performance Bond shall be confiscated if they:
 - 10.4.1 Fails to provide Advance Bank Guarantee (where applicable). OR
 - 10.4.2 Submit Forged document in support of their bid. OR
 - 10.4.3 Fails to execute Purchase Order and/or Contract in accordance with the terms & conditions of tender document/LPO/Contract. OR
 - 10.4.4 Fails to supply the short/wrong shipped items. OR
 - 10.4.5 Any other reason warranting the confiscation of the Guarantee. OR
 - 10.4.6 In case of any loss or damage suffered by the Purchaser due to any of the aforementioned act of the bidder(s) is more than the Liquidated Damages, the Purchaser will be entitled to recover the losses through encashment of Bid Securities/ Bank Guarantee(s)/Earnest Money or forfeiture of Security furnished by the bidder in other procurement cases.

11. PAYMENT:

- 11.1. Payment will be made as per terms & conditions of the Annexure A & D of Tender/Purchase Order(s) and/or Contract.
- 11.2 In cases, where payment has to be made after delivery, the payment shall be made after furnishing the required documents mentioned in Clause No.6(b) of General Terms & Conditions of Annexure G of LPO.

12. DELIVERY SCHEDULE:

- 12.1. Delivery of required material against this tender is to be completed as soon as possible from the date of receipt of firm Purchase Order, excluding a grace period of 07 days allowing for postal delivery of Purchase Order.

13. EXTENSION IN THE DELIVERY PERIOD:

- 13.1. Delivery of the goods shall be made by the supplier in accordance with the delivery schedule given in Purchase Order.
- 13.2. The supplier may claim extension of the time limits as set forth in the Purchase Order in case of:-
 - 13.2.1. Changes in the specifications of goods, material & equipment by the Purchaser.
 - 13.2.2. Delay in provision of clarifications regarding material, drawings and services by the Purchaser.
 - 13.2.3. Force Majeure pursuant to Clause # 15.
- 13.3. Justified reasons subject to a written request high-lighting the same within a period of seven working days prior to expiry of delivery period mentioned in Purchase Order.
- 13.4. It should be noted that a request for extension in delivery period shall be considered only if the supplier agrees in writing to pay any increase in taxes or any other charges levied by the Government during the extended delivery period. Purchaser shall not bear any additional price increase during the extended period.
- 13.5. In case of extension in delivery period, the supplier will extend validity of Performance Bond accordingly at his cost.
- 13.6. If the supplier fails to supply the ordered material for any reason, within stipulated time, the Performance Bond shall be forfeited.

14. LIQUIDATED DAMAGES:

- 14.1. Subject to clause 16 of Tender Document, If the supplier/contractor fails to deliver any or all of the goods/services within the time period(s) specified in the LPO/Contract, the Purchaser shall, without prejudice to other remedies under the
- 14.2. LPO/contract, deduct from the contract price / Bank Guarantee as liquidated damages, a sum not more than 0.5% of the LPO/contract price per week or part thereof for first four weeks, 1.00% per week for next four weeks and 1.5% per week exceeding four weeks up to maximum extent of 10% of the LPO/contract value.
- 14.3. In case the Purchaser is satisfied that the delayed / defective shipment was due to some mistake or circumstances beyond the control of the contractor and the contractor has not intentionally or negligently contributed in the delay, the Purchaser may impose Liquidated Damages for not more than a sum equivalent to 0.5% of the delayed or defective shipment per week or part thereof for first two weeks, 1.00 % per week for next three weeks and 1.5% per week exceeding five weeks but not exceeding 10% of the LPO/contract value of the delayed/defective shipment provided that the contractor takes immediate remedial measures for the-replacement of defective shipment and takes prompt steps to mitigate the delay. The Purchaser may however, impose Liquidated Damages as per (a) above if the delayed or defective shipment has affected the project completion schedule or has resulted in production losses.
- 14.4. Even after imposition of LDs, if the supplier fails to materialize the delivery (material and or services); the Purchaser reserves the right to cancel Purchase order/contract and to forfeit the Guarantee (if applicable) after intimating the supplier for such cancellation / forfeiture.

15. FORCE MAJEURE:

- 15.1. The supplier shall not be liable for penalty for delay in delivery of ordered goods, if, and to the extent delay in delivery or other failure to perform his obligation under the Purchase Order, of being the result of occurrence of Force Majeure i.e. causes such as natural calamities, war, civil disturbance, military action, fire as well as other circumstance proved to the satisfaction of the Purchaser to be beyond the reasonable control of the supplier, which may impede the fulfillment of the obligations under the Purchase Order.
- 15.2. The supplier shall notify the Purchaser promptly of the occurrence of Force Majeure and submit his case in writing within 07 days of such occurrence.
- 15.3. If any of the party is prevented to fulfill its assumed obligations by Force Majeure of constant duration of at least one month, the party shall meet for negotiation. If no satisfactory agreement is reached within a period of two months from the commencement of the Force Majeure conditions, either party shall have the right to cancel the Purchase Order with immediate effect.

16. INSPECTION AND TEST:

- 16.1. The Purchaser's representative(s) shall have the right to inspect and/or test the goods to confirm their conformity with respect to specifications mentioned in the Purchase Order. The representative of Supply Chain Management Department will witness the inspection (where so required).
- 16.2. Should any inspected or tested goods fail to conform to the specifications the purchaser shall reject them and supplier shall replace the rejected goods. All costs incurred on such replacement shall be entirely born by the supplier. Rejected material shall be moved / replaced by the supplier within 07 days from the receipt of letter/fax issued by the SCM Department. The supplier shall be liable for the storage charges @ ½% (half percent) of the cost of rejected material on every day basis, if the same is not removed within seven days.
- 16.3. Acceptance/rejection of the material by 3rd party (where required) will be final and binding on both the parties.

17. WARRANTY:

- 17.1. The supplier shall warrant that all goods supplied under Purchase Order shall be according to specifications given in Purchase Order and approved drawings/ design etc. Any deviation in material, drawing/design (where applicable) will be replaced by the supplier at his cost.
- 17.2. The Purchaser shall promptly notify the supplier in writing, of any claims arising under this warranty.
- 17.3. The supplier will invariably provide warranty/guarantee of spare and consumables.

18. QUALIFICATION OF SELECTED BIDDER(S):

- 18.1. The Purchaser will determine to its satisfaction whether the bidder(s) selected as having submitted the lowest evaluated, technically responsive bid qualifies to satisfactorily perform the order.
- 18.2. The determination will take into account the bidder(s) financial, technical & production capabilities, availability of items ordered for. The bidder(s) shall provide necessary documents as proof along with the bid.
- 18.3. Any affirmative determination will be a pre-requisite for award of the Purchase Order to the bidder(s). A negative determination will result in rejection of the bid.
- 18.4. The Purchaser reserves the right at the time of award of order to increase or decrease to a reasonable extent in the quantity of goods specified in the Tender Document without any change in price or other terms and conditions.

19. ADVANCE BANK GUARANTEES:

- 19.1. The successful bidder(s) will have to submit a Bank Guarantee as per format attached at (Annexure-I) as per Tender Document Clause No.1.17 equal to the amount of advance, if allowed under Tender terms within the period specified in the Letter of Intent.
- 19.2. The Purchaser reserves the right to check the authenticity of Advance Bank Guarantee from the concerned Bank.
- 19.3. The Advance Bank Guarantee will be confiscated if they:
- 19.1.1 Submit Forged document in support of their bid. OR
 - 19.1.2 Fails to execute Purchase Order and/or Contract in accordance with the terms & conditions of tender document/LPO/Contract. OR
 - 19.1.3 Fails to supply the short/wrong shipped items. OR
 - 19.1.4 Any other reason warranting the confiscation of the Guarantee. OR
 - 19.1.5 In case of any loss or damage suffered by the Purchaser due to any of the aforementioned act of the bidder(s) is more than the Liquidated Damages, the Purchaser will be entitled to recover the losses through encashment of Bid Securities/ Bank Guarantee(s)/Earnest Money or forfeiture of Security furnished by the bidder in other procurement cases
- 19.4. 19. You are encouraged to inform Managing Director & General Manager (SCM) on the following addresses/ contacts, in case where any OGDCL employee ask for any type of favor whether monetary or in kind: -

DESIGNATION	ADDRESS	TEL #	FAX #	E. MAIL
Managing Director	OGDCL HOUSE, JINNAH VENUE, ISLAMABAD	051-9209701	051-9209708	md@ogdcl.com
Field Manager	Kunnar/KPD-TAY Field	022-2720749	022-2761410	kunnar@ogdcl.com

Yours faithfully,

Incharge Electrical Section

Kunnar/KPD-TAY Oil Field & LPG Plant

C/O TCS Office Tando Jam Hyderabad Sindh –Pakistan

Oil & Gas Development Company Limited.

Phone No. Direct: 92-22-2720748

Fax No. 022-2720749

E-mail: icelectrical_kunnar@ogdcl.com

SCHEDULE OF REQUIREMENT**T.E-10006612-112-KNR-2023****“Hiring of Engineering Services for Detailed Review of Electrical Power System Protection Coordination, ARC Flash Analysis, Design Bottlenecks and Reliability Enhancement at KPD TAY Plant”**

SN	Description	Qty	UoM	Total Rate (w/ Taxes)	Deviation
1	<u>Hiring of Engineering Services to conduct periodic Electrical Power System Protection Coordination review, ARC Flash Analysis, Design Bottlenecks and Reliability Enhancement at KPD TAY Plant (Refer Annexure-A as Attachment for Details of SOW)</u>	1	Lumpsum Job		

GENERAL TERMS & CONDITIONS

- Bidder shall provide the technical and financial bids each scope wise as per SOW mentioned at para 4.1. Moreover the said project shall be executed in two phases i.e Phase-1 SOW and Phase-II SOW.
- The milestone payment shall be made partially i.e 50% of total project bid value after completion of phase 1 of SOW while remaining 50% would be made after completion of phase 2 during ATA and total project closure as approved by OGDCL (invoice duly verified by Site team).
- Bidder to provide financial proposal against complete SOW (Phase-I and Phase-II) in single line item mentioning overall SOW single cost (Lump sum covering all aspects), as the financial evaluation would be done on total project cost basis.
- Bidders to note that for SOW Phase-II, the ATA schedule can be changed subject to the approval from Petroleum Ministry GoP. Therefore, bidder has to perform the activity without any legal bindings and incurring any additional cost at later stage if ministry changes the schedule from September 2023 to some other date.
- OGDCL shall provide accommodation to engineering company personnel at their camp located within the close proximity of KPD-TAY Gas Process Plant.
- Bidder to provide list of all data, drawings, reports, documents along with technical bid that are required from OGDCL to execute all works under this project.
- OGDCL anticipates one or more site visit of vendor for data gathering and fault record collection, relay up gradation and testing and shall provide all design studies/drawings/ testing reports.
- OGDCL's review/approval of engineering, design and/or any other documents shall not relieve the Engineering firm from any of their responsibilities/ accountabilities and obligations under the CONTRACT/ PO.
- OGDCL reserves the right to vet all the network and protection settings and other relevant project deliverables from consultant and if found any deviations/improvement as recommended by consultant, contractor has to review & justify without any financial impact and implement the same accordingly.

10. Equipment shall be visually inspected to collect the necessary nameplate data used in the analysis. Bidder/contractor is responsible for visual verification of this data, including transformers, switchgear and breakers, relays, direct-acting trip units, etc. Data that may not be readily accessible or may not have nameplate data such as conductors, bus way, etc. can be taken from drawings.
11. OGDCL KPD-TAY plant shall provide qualified personnel to show contractor/bidder equipment location and to open all equipment doors, locks, etc. where possible and necessary to collect nameplate data.
12. Data collection shall include the MV Generators/Switchgears/Motors/Soft starters, LV switchgears/Motors/MCCs/VFDs/Soft starters and Step-down transformer and other miscellaneous equipment.
13. Contractor firm shall provide the list of completed projects national/international and have internal safety program and up-to-date electrical safety training that includes arc flash hazards. Bidder/contractor shall have to comply with OGDCL plant/facility safety regulations during field data collection.
14. Provide 3 sets of colored printed hard copies and PDF soft file including system model software file.
15. Time line along with method statement, showing detailed breakup from award of contract till project closeout, for the execution of project to be submitted to OGDCL along with technical bid submission.
16. The contractor company should have an established quality control system and have vast experience of performing electrical network studies and must have performED same study during last three years.
17. Only automated software-based calculation and testing is required and substitution or approximation or manual entry method would not be allowed.
18. Bidder to demonstrate the capability to execute the whole SOW Phase-I and 2, and shall have their own calibrated testing instrument and valid softwares with ownership proof and moreover no any sub-contractor shall be allowed but only after the approval of OGDCL.
19. Provide a one (1) page Project Organization Chart that identifies all significant project personnel by name and their role. The chart must identify quality control/quality assurance or technical review personnel.
20. Provide one (1) page resumes and qualifications of the persons who will serve as the Project Manager and Project Engineers. The Project Manager must be an electrical engineer and shall have a minimum of 15 years of relevant experience. The Project Engineer must have a minimum of ten (10) years of similar projects experience.
21. Provide Arc Flash and NFPA 70E training with video aids to all staff at site, in two groups due to OGDCL rotation policy, after final presentation of project closeout. Training certificates shall be required for each participant.
22. Provide a proposed project timeline with covering every aspect of complete project. Timeline shall include contract award date; on-site data collection timeframe, system model development and analysis timeframe, draft report review, trainings and final report presentation.
23. Contractor to share his safety policy & follow all OGDCL safety precautions and permit to work system during execution of work.

24. Bidding procedure adopted will be single stage two envelope. Bidder to properly seal both bids & clearly mention Technical /Financial Bid on their bids separately.

25. Bid bond to be submitted with the technical bid for an amount of Rs. 60,000/-

BIDDING FORM (TECHNICAL BID)

Oil & Gas Development Company Limited

Kunnar/KPD-TAY Oil Field & LPG Plant,
C/O TCS Office Tando Jam, Hyderabad

Gentlemen,

1. Having examined the Bidding Documents including the specifications, the receipt of which is hereby acknowledged, we the undersigned offer to supply & deliver _____ conformity with drawings, specifications of goods and conditions of Tender Document.
2. We undertake if our bid is accepted, to commence delivery within _____ days (Please specify days) from the date of receipt of your firm Purchase Order.
3. If our bid is accepted, we will provide the Performance Bond equal to 10% of the Purchase Order excluding GST, for due performance of the purchase order.
4. We agree to abide by all the terms & conditions of the tender for the period of _____ days from the opening of technical proposal & it shall remain binding upon us and may be accepted at any time before the expiry of that period or any extension thereof agreed by us.
5. Until a formal Purchase Order is placed, this bid, together with your written acceptance thereof, shall constitute a binding contract between us. We understand that you are not bound to accept the lowest priced or any bid you may receive.

Dated this _____ day of _____ 20_____

(Signature)
(In the capacity of)

Duly authorized to sign Bid for and on behalf of

(Signature of Witness)

Name: - _____

Address:- _____

BIDDING FORM (FINANCIAL BID)

Oil & Gas Development Company Limited

Kunnar/KPD-TAY Oil Field & LPG Plant,
C/O TCS Office Tando Jam, Hyderabad.

Gentlemen,

1. Having examined the Bidding Documents including the specifications, the receipt of which is hereby acknowledged, we the undersigned offer to supply & deliver _____

in conformity with drawings, specifications of goods and conditions of Tender for the sum of Rs. _____ *(Total bid amount in words)* (inclusive of all taxes with GST) or such other sum as may be ascertained in accordance with the said conditions.

2. Until a formal Purchase Order is placed, this bid, together with your written acceptance thereof, shall constitute a binding contract between us. We understand that you are not bound to accept the lowest priced or any bid you may receive.

Dated this _____ day of _____ 20_____

(Signature)
(In the capacity of)

Duly authorized to sign Bid for and on behalf of

(Signature of Witness)

Name: - _____

Address: - _____

(TO BE ATTACHED WITH TECHNICAL BID)

BID SUMMARY SHEET

TENDER NO. PROC-L / _____
For procurement of _____

1. Bidder Name _____
Address, Phone & Fax No: _____
E-mail address _____
2. Manufacturer Name & _____
Country of Origin: _____

3. Items Quoted:(give serial no. only): _____

4. Price Validity: _____
5. Offered Delivery Period: _____
6. Payment Terms: _____
7. GST Registration No. _____
8. Bidding Form (Annexure-B attached with Technical Bid): Yes No
9. Bid Security/Bid Bond must be attached with Technical Bid Yes No
(No exemption of Bid Bond is allowed as per PPRA Rule 2004
whether the bidder is from Public or Private Sector):
10. Annexure-N on Non-Judicial Stamp Paper duly attested by Notary Public Yes No
(To be attached with Technical Bid)
11. Any Deviation: _____

Signature _____

Name & Designation _____

(TO BE ATTACHED WITH FINANCIAL BID)

BID SUMMARY SHEET

TENDER NO. PROC-L / _____
For procurement of _____

1. Bidder Name _____
Address, Phone & Fax No _____
E-mail address _____
2. Manufacturer Name & _____
Country of Origin: _____
3. Items Quoted:(give serial no. only): _____

4. Total FOR Price: _____ Rs _____
(Inclusive of all taxes except GST)
5. Total FOR Price (Inclusive of all taxes with GST): _____ Rs _____
6. GST Registration No. _____
7. Bidding Form (Annexure-C attached with financial bid): Yes No
8. Any Deviation: _____

Signature _____

Name & Designation _____

SPECIMEN OF BANK GUARANTEE AS BID SECURITY/BID BOND/EARNEST MONEY

Guarantee # : _____
Date of Issue : _____
Date of Expiry : _____
Amount : _____

Oil & Gas Development Company Limited

Kunnar/KPD-TAY Oil Field & LPG Plant,
C/O TCS Office Tando Jam, Hyderabad.

In consideration of _____ hereinafter called "THE BIDDER" HAVING SUBMITTED THE ACCOMPANYING Bid against Tender No. _____ and in consideration of value received from (the bidder above), we hereby agree to undertake as follows::

1. To make unconditional payment of Rs. _____ (Rupees _____) up on your written demand without further recourse, question or reference to the BIDDER or any other person in the specified Bid after opening of the same for the validity thereof or if no such period be specified, within 150 days after the said opening or if the Bidder, having been notified of the acceptance of his bid by the Purchaser during the period of bid validity:
 - a) fails to execute Purchase Order and/or Contract in accordance with the tender document, **OR**
 - b) fails or refuses to furnish Performance Bond in accordance with tender document, **OR**
 - c) withdraws its bid during the period of bid validity, **OR**
 - d) If the documents are found forged at any stage, **OR**
 - e) Fails to supply the short/wrong shipped items or any other reason warranting the forfeiture.
2. To accept written intimation(s) from you as conclusive and sufficient evidence of the existence of a default or non-compliance as aforesaid on the part of the BIDDER and to make payment accordingly within 03 (three) days of receipt of the written intimation.
3. No grant of time or other indulgence to or composition or arrangement with the Bidder in respect of aforesaid Bid with or without notice to us shall affect this Guarantee and our liabilities and commitments hereunder.
4. This guarantee shall be binding on us and our successors in interest and shall be irrevocable.

(BANKER)



OIL & GAS DEVELOPMENT COMPANY LTD
OFFICE OF THE



Field Manager, Kunnar/KPD-TAY
Oil Field & LPG Plant, C/O TCS Office Tandojam,
Hyderabad- Pakistan

TEL: 92002 3750.
FAX: 9218048
EMAIL: _____
Web Site: www.ogdcl.com
GST No: 07-02-2802-001-55

LPO No: IBA/ / _____
M/s _____,
_____,
_____.

ISSUED ON: _____

SUBJECT: **LOCAL PURCHASE ORDER.**

Dear Sir,

Ref your quotation # _____ dated _____ opened on
_____ Against our Press Tender/Tender Enquiry/Fax Enquiry # PROC-L ()
_____ dated _____ regarding procurement of _____.

We feel pleasure in placing an order on you for the supply of stores given below.
Terms and Conditions of supply are noted below and on reverse.

A/C CODE: _____

INDENT No. _____ DT. _____

FOR: (LOCATION _____) DEPARTMENT _____

S. NO.	DESCRIPTION	QTY	UNIT	INDEX NUMBER	UNIT RATE (RUPEES)		TOTAL (RUPEES)
					(EXCL OF GST)	(INCL OF GST)	
(RUPEES _____ ONLY)						GRAND TOTAL: (INCLUSIVE OF % GST)	

TERMS & CONDITIONS:

1. **DELIVERY PLACE & PERIOD:** AT OUR _____ WITHIN _____ AFTER ISSUANCE OF LPO.
2. **PAYMENT CLAUSE:** AS PER TERMS & CONDITIONS OF THE ANNEXURE A & D.
3. **PERFORMANCE BOND:** 10% PERFORMANCE BOND AS PER CLAUSE # 10 OF TENDER DOCUMENT MUST BE SUBMITTED WITHIN 07 DAYS (if applicable).
4. **INSPECTION:** AT FACTORY
5. PLEASE ACKNOWLEDGE RECEIPT OF THIS ORDER IMMEDIATELY ACKNOWLEDGEMENT AND/OR PERFORMANCE, PARTIAL OR COMPLETE, OF THIS PURCHASE ORDER SHALL CONSTITUTE THE SUPPLIER/SELLER'S ACCEPTANCE OF ALL TERMS AND CONDITIONS OF THIS PURCHASE ORDER WITHOUT REGARD TO AND IN SUPERSESSION OF ANY AND ALL PREVIOUS CORRESPONDENCE/ DOCUMENTATION BETWEEN THE PARTIES.

for **OIL & GAS DEVELOPMENT COMPANY LTD.**

GENERAL TERMS AND CONDITIONS

1. **GENERAL:** These terms and conditions shall form an integral part of this Local Purchase Order and both the Supplier/Seller and the Purchaser shall be bound by all the provisions contained hereunder.
2. **DELIVERY:**
 - a. The material strictly according to specification must be delivered through Delivery Challan in triplicate at the place and within the time mentioned in this order (on reverse) by you at your own expenses {excluding a grace period of 07 (seven) days for postal delivery of this Purchase Order}.
 - b. Time is of the essence of this order.
3. **EXTENSION IN SUPPLY PERIOD:** Supply period may be extended in exception cases provided that;
 - a. Force Majeure case is established by the Supplier.
 - b. A written request is made within a week time before expiry of supply period.
4. **INSPECTION:** All items of this order will be subject to acceptance/rejection by the Inspection Committee/3rd Party Inspector (if required), who will give its decision within 07 days of receipt of material. Rejected material shall be removed / replaced by the Supplier within 07 days from the date of receipt of letter/fax, issued by the SCM Deptt. The Supplier will be liable to pay storage charges @ ½ % of the cost of rejected material on every day basis if the same is not removed within 07 days. After 07 days the penalty will be charged at the rate of 5% per day with the supplier's maximum liability under this clause not to exceed 5% of the total value of the Purchase Order.
5. **LIQUIDATED DAMAGES:**
 - a. Subject to clause 16 of Tender Document, If the supplier/contractor fails to deliver any or all of the goods/services within the time period(s) specified in the LPO/Contract, the Purchaser shall, without prejudice to other remedies under the LPO/contract, deduct from the contract price / Bank Guarantee as liquidated damages, a sum not more than 0.5% of the LPO/contract price per week or part thereof for first four weeks, 1.00% per week for next four weeks and 1.5% per week exceeding four weeks up to maximum extent of 10% of the LPO/contract value.
 - b. In case the Purchaser is satisfied that the delayed / defective shipment was due to some mistake or circumstances beyond the control of the contractor and the contractor has not intentionally or negligently contributed in the delay, the Purchaser may impose Liquidated Damages for not more than a sum equivalent to 0.5% of the delayed or defective shipment per week or part thereof for first two weeks, 1.00 % per week for next three weeks and 1.5% per week exceeding five weeks but not exceeding 10% of the LPO/contract value of the delayed/defective shipment provided that the contractor takes immediate remedial measures for the-replacement of defective shipment and takes prompt steps to mitigate the delay. The Purchaser may however, impose Liquidated Damages as per
 - (a) above if the delayed or defective shipment has affected the project completion schedule or has resulted in production losses.
 - c. Even after imposition of LDs, if the supplier fails to materialize the delivery (material and or services); the Purchaser reserves the right to cancel Purchase order/contract and to forfeit the Guarantee (if applicable) after intimating the supplier for such cancellation / forfeiture.
6. **DOCUMENTATION FOR PAYMENT:**
 - a. 1/5 withholding tax will be deducted from your payment in following manners:
 - i. No deduction of withholding tax for imported goods and value added tax has been paid at the time of import stage.
 - ii. 1/10th of withholding Sales Tax will be deducted for Local goods (Distributors, Wholesalers, Dealers including Petroleum Dealers, Retailers).
 - iii. 1/5th of withholding Sales Tax will be deducted for Locally Manufacturers and Importers.
 - iv. 1% of withholding Sales Tax will be deducted for sales tax un-registered firms.
 - b. Following documents must be provided directly to Manager (Accounts), OGDCL House, Islamabad for processing the case to release payment:

<u>Accountable Documents</u>	<u>To be provided by</u>
i. Original Commercial Invoice(s) (as per LPO) having NTN/CNIC Numbers	Vendor -
ii. Original Sales Tax Invoice(s) along with Copy of Annexure "C" issued by FBR	Vendor -
iii. Original Freight/Insurance Invoice (where applicable)	Vendor -
iv. Original Delivery Challan duly signed & Stamped by Location/Store Incharge	- I/c Store
v. Original / System generated LRS duly signed & Stamped by Location/Store Incharge	- I/c Store
vi. Original / System generated Inspection Report duly signed & Stamped by Location/ Store Incharge	- I/c Store
vii. Copy of valid Professional Tax Paid/Clearance Certificate	Vendor -
viii. Copy of National Tax Number Certificate (NTN)	Vendor -
ix. Copy of General Sales Tax Number Certificate (GST)	Vendor -
x. Completion Certificate duly signed & stamped (where applicable)	- I/c Store
xi. Copy of valid Tax Exemption Certificate (if any)	Vendor -

Note: No payment will be processed in the absence of above mentioned documents. Vendors are advised to submit complete documents mentioned above to avoid delay in processing of the payment.
7. You are encouraged to inform the M.D. and Head of Department(s) on the following addresses/contacts, in case where any OGDCL employee asks for any type of favor whether monetary or in kind:

DESIGNATION	ADDRESS	TEL #	FAX #	E. MAIL
MANAGING DIRECTOR	OGDCL HOUSE, JINNAH AVENUE, ISLAMABAD	051-9209701	051-9209708	md@ogdcl.com
FIELD MANAGER	KUNNAR/KPD-TAY FIELD	022-2720749	022-2761410	kunnar@ogdcl.com
8. **GOVERNING LAW:** This Local Purchase Order and any matter relating thereto shall be governed by the laws of Pakistan.
9. **WARRANTIES:** Supplier/Seller warrants that all goods, material, equipment or services furnished hereinabove will conform strictly to the Purchaser's specifications.
10. **TITLE:** Supplier/seller warrants that the goods, material, equipment shall be delivered free from any and all security interests, liens, encumbrances and claims of any nature.
11. **COMPLIANCE WITH LAWS:** Supplier/seller agrees to indemnify the Purchase for any loss, damage or cost suffered by the Purchaser as a consequence of the Supplier/seller's failure, deliberate or otherwise, to comply with any applicable laws, rules, regulations or orders/directives of any public sector entity and/or Government.
12. **ARBITRATION:** Any dispute, difference or question arising out of or in respect of this Purchase Order shall be settled by arbitration in accordance with the Arbitration Act, 1940.
13. **ACKNOWLEDGEMENT:** Please acknowledge receipt of this order within 03 days otherwise acceptance of all contents of LPO will be assumed.

SPECIMEN OF BANK GUARANTEE AS PERFORMANCE BOND

Guarantee # _____
Date of issue :- _____
Date of expiry:- _____
Amount :- _____

Oil & Gas Development Company Limited
Kunnar/KPD-TAY Oil Field & LPG Plant,
C/O TCS Office Tando Jam, Hyderabad

In consideration of your issuance of Local Purchase Order and/or Contract No _____ to M/s. _____ called supplier and/or Contractor and in consideration for value received from supplier and/or Contractor we (Please mention name of Bank) at the request of M/s. _____ (Please mention name of supplier and/or Contractor) hereby agree and undertake as:-

1. To make unconditional payments to you as called upon 10% of the value of the LPO and/or Contract (please mention amount of guarantee in words and figures) mentioned in the said LPO and/or Contract on your return demands without further recourse, question or reference to supplier and/or Contractor or any other person in the event of default, non-performance or non-fulfillment by supplier and/or Contractor of his obligations, liabilities, responsibilities or any of the following reasons under the said LPO and/or Contract which you shall be the soul judge:
 - a. Fails to provide Advance Bank Guarantee (where applicable).
 - b. Submit Forged document in support of their bid.
 - c. Fails to execute Purchase Order and/or Contract in accordance with the terms & conditions of tender document/LPO/Contract
 - d. Fails to supply the short/wrong shipped items.
 - e. Any other reason warranting the confiscation of the Guarantee.
2. To accept return intimation from you as conclusive and sufficient evidence of existence if a default or breach as aforesaid on the part of supplier and/or Contractor and to make payment accordingly within 03 (Three) days of receipt thereof.
3. To keep this guarantee in full force from the date hereof until 30 (Thirty) days from the date of delivery of last consignment of material at given destination as per LPO and/or Contract.
4. To keep 50% amount of this guarantee, enforce from the date hereof until 12 months from the date of delivery of last consignment of the material of at given destination as per LPO and/or Contract.
5. that no grant of time or other indulgence to, amendment in the terms of LPO and/or Contract by agreement between the parties or imposition or agreement with LPO and/or Contract in respect of the performance of this obligations under the said agreement, with or without notice to us shall in any manner discharged or otherwise affect this guarantee and our liabilities and commitments their under.
6. This guarantee shall be binding on us and our successor's interest and shall be irrevocable.
7. This guarantee shall not be affected by any change in the constitutions of the Guarantor Bank or the supplier and/or Contractor.

(BANKER)

Note: The PBG should be valid for 100% value to cover the delivery of the last consignment/ completion of project whichever is later plus 08 weeks. Accordingly, 50% of PBG must be valid for further one year.*

** 08 weeks are required to cover the period for authenticity of PBG, inspection and clearance period and minor extension in delivery period (in any) etc.*

BANK GUARANTEE AS ADVANCE PAYMENT

Guarantee # _____
Date of issue :- _____
Date of expiry:- _____
Amount :- _____

Oil & Gas Development Company Limited
Kunnar/KPD-TAY Oil Field & LPG Plant,
C/O TCS Office Tando Jam, Hyderabad

1. WHEREAS M/s _____ (hereinafter called the Supplier) have requested us to furnish a Bank Guarantee for Pak Rs. _____ (Rupees _____) being _____% advance of the ordered value of Pak Rs. _____ (Rupees _____) in respect or LPO # IBA/ _____ issued on _____.
2. AND IN CONSIDERATION of your paying an advance of Pak Rs. _____, Rupees (_____) hereby guarantee to pay on demand a sum of Pak Rs. _____.

WE ALSO HEREBY AGREE:

- a) to make unconditional payment of maximum amount of Pak Rs. _____ without any question and without referring to the Supplier.
- b) to keep the guarantee in force till _____.
- c) to extend the period of enforceability of this guarantee if it becomes necessary to you and agreed to by us.
- d) we further undertake not to revoke this guarantee during its specified duration as above state except with your consent.

(BANKER)

Note: The Advance Bank Guarantee should be valid for 100% value to advance till 06 weeks from the date of the delivery of last consignment/ completion of project whichever is later.*

* *06 weeks are required to cover the period for authenticity of Advance Bank Guarantee, preparation of advance cheque etc.*

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.
CERTIFICATE

Submitted to OGDCL with the reference to Purchase Order No. _____ hereby declares its intention not to obtain or induce the procurement of any contract, right, interest, privileges or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any corrupt business practice.

Without limiting the generality of the foregoing, the Seller/ Supplier represents and warrants that it has fully declared the brokerage, commission, fees etc., paid or payable to anyone and not given or agreed to give and shall not be given or agree to give to anyone within or outside Pakistan either directly or indirectly through any national or juridical person, including its affiliate, agent, associate, broker, consultant, briber, finder's fee or kickback, whether described as consultant fee or otherwise, with the object of obtaining or including the procurement of a contract right, interest, privilege or other obligation or benefit in whatsoever form from GOP except that privilege or other obligation or benefit in whatsoever form from GOP except that which has been expressly declared pursuant hereto.

The Seller/Supplier certifies that it has made and will make full disclosure of all agreement and arrangements with all persons in respect of or related to the transaction with GOP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

The Seller/ Supplier accepts full responsibility and strict liability for making any false declaration not making full disclosure, mis-representing facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right interest, Privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GOP under any law, contract or other instrument, be void ab initio at the option of GOP.

Notwithstanding any rights and remedies exercised by GOP in this regard, the Seller/ Supplier agrees to indemnify GOP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GOP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Seller/Supplier as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GOP.

For & On Behalf of
Seller/ Supplier

(WHERE APPLICABLE, TO BE SUBMITTED ON DEMAND OF OGDCL)

FAIR PRICE CERTIFICATE

WE M/S _____ HEREBY CERTIFY
THAT PRICES QUOTED BY US AGAINST OIL AND GAS DEVELOPMENT LIMITED TENDER
ENQUIRY NO. PROC-L _____ ARE THE LOWEST AND
MOST COMPETITIVE AS GENERALLY APPLICABLE TO ALL OTHER BUYERS AND OR SOLD
THROUGH OUR AGENTS AS PER PREVAILING INTERNATIONAL MARKET AS ON THE
DATE OF QUOTE AND IF IT IS ESTABLISHED AT ANY STAGE THAT THESE WERE HIGHER
WE SHALL BE HELD RESPONSIBLE AND AGREE TO PAY IMMEDIATELY THE
DIFFERENTIAL TO OIL & GAS DEVELOPMENT COMPANY LIMITED.

SIGNATURE AND SEAL OF THE
*MANUFACTURER/SOLE AGENT/AUTHORIZED
DEALER*

NOTE: FAIR PRICE CERTIFICATE WILL BE REQUIRED, IN CASE SINGLE BID IS
FOUND TECHNICALLY RESPONSIVE IN THE RESPECTIVE TENDER.

(On official letter-head of the contractor)
To be signed by the Chief Executive of the
bidding company or a representative duly
authorized by board resolution.

Integrity and Ethics Undertaking

We hereby commit and undertake to observe the following principles during our participation in the contract execution:

- a) That we will not directly or through any other person or firm, offer, promise or give to any of the employees of OGDCL involved in or relevant to the execution of the contract any gain, pecuniary benefit or facilitation payment in order to obtain in exchange any advantage of any kind whatsoever during the execution of contract or at any stage thereafter.
- b) That we did not enter with any bidder into any undisclosed agreement or understanding either formal or informal to restrict competitiveness or to cartelise in the bidding process.
- c) That we will ensure that the remuneration of agents (*if engaged*) is appropriate and for legitimate services only.
- d) That we will not use subcontracts, purchase orders or consulting agreements as means of channeling payments to employees of OGDCL.
- e) That we will not and have not committed any offence under the Pakistan Penal Code, Prevention of Corruption Act or National Accountability Ordinance to achieve any advantage, gain or benefit during the tender process or the execution of contract.

We further understand and acknowledge that any violation or transgression of the above mentioned principles will attract disqualification from doing business with OGDCL and may also result in permanent exclusion from future contact award processes.

We also accept and undertake to respect and uphold OGDCL's absolute right to resort to and impose such disqualification, debarment or exclusion.

For and on behalf of _____
Tender No. _____
Contract No _____

(On official letter-head of the bidder)

To be signed by the Chief Executive of the bidding company or a representative duly Authorized by board resolution.

Integrity and Ethics Undertaking

We hereby commit and undertake to observe the following principles during our participation in the tender process and during the contract execution:

- a) That we will not directly or through any other person or firm, offer promise or give to any of the employees of OGDCL involved in the tender process or execution of the contract any gain, pecuniary benefit or facilitation payment in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of contract.
- b) That we have not and will not enter with other bidders into any undisclosed agreement or understanding either formal or informal to restrict competitiveness or to cartelize in the bidding process.
- c) That we will ensure that the remuneration of agents (*if engaged*) is appropriate and for legitimate services only.
- d) That we will not use subcontracts, purchase orders or consulting agreements as means of channeling payments to employees of OGDCL.
- e) That we will not commit any offence under the Pakistan Penal Code, Prevention of Corruption Act or National Accountability Ordinance to achieve any advantage, gain or benefit during the tender process or the execution of contract.

We further understand and acknowledge that any violation or transgression of the above mentioned principles will attract disqualification from the tender process and may also result in permanent exclusion from future contract award processes.

We also accept and undertake to respect and uphold OGDCL's absolute right to resort to and impose such disqualification, debarment or exclusion.

For and on behalf of _____
Tender No. _____

Form 4
Mandatory for participation in Bidding Process

AFFIDAVIT

I, _____ S/o _____ aged _____
years _____ working as Proprietor/Managing Partner/Director of M/s
_____ having its registered office
at _____ do hereby solemnly affirm and declare on oath as under:

1. That I am competent to swear this affidavit being proprietor/one or the partners/ Director of M/s _____
2. That M/s _____ is a proprietorship/partnership firm/company is participating in tender process conducted by OGDCL.
3. That I hereby confirm and declare that none of my/our group/sister concern/associate company is participating/ submitting this tender.
4. That I hereby confirm and declare that my/our firm/company M/s _____ and my/ our firm/group/company/ sister concern / associate company have not been black listed/de-listed any Institutional agencies/Govt. Deptt/ Public Sector Undertaking.
5. That there is no change in the Name & Style, Constitution and Status of the firm, after Pre-qualification.
6. That I further undertake that in case any of the facts contained above and in-our application is round other-wise or incorrect or false at any stage, my/our firm/company/ group/sister concerns/ associate companies shall stand debarred from the present and future tenders of the OGDCL.

(Signature of the Proprietor/ Managing Partner/Director with Seal)

DEPONENT

Verified at _____ on _____ that the contents of paras 1 to 6 of this affidavit are true and correct to best of my knowledge and no part of this is false and nothing material has been concealed or falsely stated therein.

(Signature of the Proprietor/ Managing Partner/ Director with Seal)

DEPONENT

(Signature & Seal of Notary)

BLACK LISTING PROCEDURE

1. Blacklisting.

Blacklisting means; temporarily or permanently, barring an entity or a person against whom proceedings have been initiated including but not limited to bidder, contractor, supplier, agent, consultant, company, partnership or firm; hereinafter referred to as, Respondent from participating in any future procurement of goods and services. The Respondent(s) individually or collectively as a consortium may stand blacklisted if found to have been involved in any or all of the following acts:

- a) Undermines or adversely affects the operations of the company through any of the following:
Withdrawing a bid during the bid validity period; Failure or refusal to:
 - i. sign the Contract;
 - ii. accept Purchase Order / Service Order Terms;
 - iii. execute work;
 - iv. submit Bank Guarantee as per tender terms;
 - v. make supplies as per specification agreed;
 - vi. fulfill contractual obligations as per contract;
 - vii. meet purchase order / service order terms and conditions; and/or,
 - viii. to remedy underperformance as per contractual obligations.
 - ix. Or any other non-compliance of obligations vital for the execution / compliance of the contract.
- b) Repeated non-performance.
- c) Indulgences in corrupt or fraudulent practices while obtaining or attempting to obtain contracts in the company.
- d) Convicted of fraud, corruption, tax evasion or criminal misappropriation by a court of competent forum.
- e) Notified blacklisted/debarred/cross debarred by any public sector organization or international agency. In this regards the contractor has to submit a certificate that he or his principal is not declared blacklisted / debarred / cross debarred by any public sector organization or international agency
- f) Furnished information that was false and materially inaccurate or submitted forged or fake documents.

2. Debarment of Natural Terms.

The following shall stand disqualified and debarred from participating in OGDCL tenders or contracts pursuant to black listing proceedings:

- i. In case of a company; all directors including its Chairman, Chief Executive and Chief Financial Officer.
- ii. In case of partnership; all partners.

3. Debarment of Associated Companies or Entities.

Where a company or an entity has been blacklisted, all its associated or subsidiary undertaking whether by way of common directorship, common management and control, shareholding or direct or indirect control through directors of blacklisted entity etc. shall also stand disqualified from participating in OGDCL tenders or contracts

4. Standing Committee on Procurement Rules Enforcement (Committee).

- a) The Managing Director shall constitute a Standing Committee on Procurement Rules Enforcement (Committee) with five members. The Chairman of the Committee and at least one member shall be an Executive Director (EG-IX). GM(Legal) should be a permanent member of the committee. The Head of Supply Chain shall act as the Secretary of the Committee.
- b) The Committee shall submit an annual report to the Board of Directors for consideration.
- c) The Committee deliberations as a guiding principle should be based upon adequate evidence. Consideration should be given as to how much credible information is available, and its reasonableness in view of surrounding circumstances, and inferences which may be drawn from the existence or absence of affirmed facts. The assessment should include all documents available and presented.

5. Proceedings for blacklisting.

- a) General Manager (Supply Chain Management) on his own accord or on receipt of information or a complaint shall refer the matter to the Standing Committee on Procurement Rules Enforcement (Committee).
- b) The Committee after examining the material placed before it shall determine whether it is necessary and appropriate to initiate formal black listing proceedings.
- c) In case the Committee decides to initiate blacklisting proceedings Respondent shall be formally intimated in writing about the nature of complain/matter and initiation of blacklisting proceedings.
- d) The Respondent shall be intimated by giving a seven days' notice through courier services, registered post or fax or email and, shall be provided an opportunity of furnishing response either through written representation or personal hearing or both.
- e) In case the Respondent fails to furnish his defense or representation the committee may proceed ex-parte on the basis of information, record and material available before it provided that two subsequent notices at three working day
- f) nbs intervals have been given.
- g) The Committee shall complete its proceedings within 30 days from the date of first notice given pursuant to paragraph (d) above.
- h) The Respondent against whom blacklisting proceedings have been initiated may be represented through:
 - i. In case of an individual or sole proprietorship; in person.

- ii. In case of a firm or partnership; by the Chief executive or the Managing Partner, duly authorized.
- iii. In case of a company; by the Chief Executive or a Director or any officer duly authorized by the Company.

6. Findings & Decisions.

- a) The Committee after finalizing its proceedings shall record its findings in writing and decide one of the following measures for implementation:
 - i. Temporarily debarred, specifying the time period;
 - ii. Blacklisted if the Respondent fails to take remedial action within the specified time; or,
 - iii. Blacklisted.
- b) The order of the Committee shall be communicated in writing as per Form 3.
- c) The documents, deliberations reduced in writing and all records of proceedings are to be maintained for five years by the Supply Chain Department.

7. Appeal.

- a) The Respondent may appeal within three working days of intimation of decision of the Committee to the Managing Director in writing of any irregularity in the decision of the Committee.
- b) If there exists any substance in the appeal the Managing Director after recorded reasons may direct that Committee may review the case by providing opportunity of hearing to the Respondent provided that the review shall be completed within 15 days.
- c) The Committee shall record its findings in writing and refer the same to the Managing Director for appropriate orders.
- d) If the decision at 6 a(ii) or (iii) materializes then the decision is fit to be publicized and communicated to PPRA, and any other department if deemed necessary, and also hoist on OGDCL website.



OIL AND GAS DEVELOPMENT COMPANY LIMITED
KUNNAR / KPD TAY LPG PLANT
Phone # 022-2761404 & Fax#022-2761405

REQUEST FOR QUOTATION

Tender Enquiry # 10006612-112-KNR-2023 "Hiring of Engineering Services to conduct periodic Electrical Power System Protection Coordination review, ARC Flash Analysis, Design Bottlenecks and Reliability Enhancement at KPD TAY Plant"

SCOPE OF WORK

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MINIMUM APPLICABLE STANDARDS

1. *IEEE Std C37.91-2000, IEEE Guide for Protective Relay Applications to Power Transformers.*
2. *IEEE Std 242-2001, IEEE Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems.*
3. *Other Applicable standards like NETA MTS and ATS 2015 to latest.*
4. *ANSI Z535.4, NEC 110.16 and NFPA 70E 130.3, UL 969 guidelines.*

LIST OF ABBREVIATIONS:

ABBREVIATION	DESCRIPTION
OC	Overcurrent
SLD	Single Line Diagram
TMS	Time Multiplies Settings
TOL	Thermal Overload
CTI	Coordination Time Interval
MCTR	Medium Complexity Technical Review
DT	Definite Time
SI	Standard Inverse
VI	Very Inverse
EI	Extremely Inverse
FLC	Full Load Current
CT	Current Transformer
IEEE	Institute of Electrical and Electronics Engineers
IEC	International Electrotechnical Commission
MCC	Motor Control Center

Table 1 List of Abbreviation

1 INTRODUCTION & BACKGROUND

1.1 ORIGINAL DESIGN

The original design of electrical power system of KPD-TAY phase-II consists of 5 No. 3.3MW 6.6kV gas engine driven generators (4+1 Scheme), 1 No. 1.4MW 6.6kV diesel engine driven emergency generator, 1 No. 6.6kV primary switchgear (SWG-001), 1 No. 6.6kV secondary switchgear (SWG-002) and 5 No. MCCs (MCC-01 to MCC-05), Cooling Tower MCC, RO Plant MCC and Incinerator Switchgear in Main MCC, 10 No Transformers for power distribution to various loads.

1.2 EXISTING POWER GENERATION CONFIGURATION

At present, the existing power generation/distribution system of plant consists of 3 Nos. Operating & 2Nos standby (3+2), 6.6kV gas engine driven generators for the main or normal operation and a diesel engine driven generator for the emergency & black start.

1.3 EXISTING POWER DISTRIBUTION/POWER FLOW

All the aforementioned generators are connected to main MV Switchgear (SWG-001) comprised of generator incomers and bus tie breakers (VCB's). Power from main MV Switchgear (SWG-001) is further transmitted to MV switchgear/MCC (SWG-002) comprising of main incomers, MV motors starters and transformers (MV/LV) incomers. Motors of 200KW & 500KW are being supplied from MV switchgear/MCC (SWG-002). Subsequent to step down through respective transformers dedicated to different LV switchgears/MCC, LV load is further distributed among different LV switchgear/MCC.

Existing LV Loads (comprising of utilities and essential) are connected to different part of LV Switchgear/MCC-03, 04 and 05 and each Switchgear/MCC are distributed between bus-A and Bus B connected through bus coupler. Each bus of Switchgear /MCC -03, 04 & 05 are being fed from separate transformer, and tie breakers/bus couplers are normally open until and unless fault occur in any one transformer or during maintenance condition. While main process loads train-1 & train-2 are being fed by their respective LV switchgear/MCC based on radial system comprising of single unit without tie breaker formation.

2 PROBLEM STATEMENT

Since KPD-TAY plant commissioning in 2016, multiple electrical power system faults observed, comprising of some major faults in MV motors and transformer LV BTB, Lack of proper protection coordination was observed between various protection devices in MV/LV networks from downstream to upstream, causing blackout/power failures scenarios.

1. MV VCUs + MV Fuses mal operation in the event of certain faults
2. Nuisance tripping issues in LV MCC
3. Nuisance tripping in MV motors

3 OBJECTIVE OF THE PROJECT

OGDCL is requesting proposals from qualified firms to provide engineering services to review the plant's existing electrical power system studies in all aspects and to re-calculate the protection coordination/short circuit/Load flow analysis and to identify the risks and bottlenecks pertaining to design/equipment selection and operational aspects in whole electrical power system, Arc flash hazard analysis study to determine incident energy, arc flash protection boundaries, and required PPE for all electrical equipment in the facility and Arc flash hazard labels accordingly and to propose any sort of additional requirement that guarantees the overall power system stability and reliability.

4 SCOPE OF WORK

Scope under this project is divided into two phases as mentioned below:

1. PHASE-I (Before ATA 2023)

- I. re-calculate the protection coordination/short circuit/Load flow analysis and to identify the risks and bottlenecks pertaining to design/equipment selection and operational aspects in whole electrical power system and Earthing System Configuration
- II. Arc flash hazard analysis study

2. PHASE-II (During ATA 2023)

- I. Upgradation, Validation and SAT after incorporating new recommended setting values in all Protection Relays complete in all respect.

1. PHASE-I SOW

4.1 ALL PROTECTION SCHEMES ASSESSMENT, VALIDATION, COORDINATION AND IMPROVEMENT IF REQUIRED IN ALL RESPECT. INCLUDING IDENTIFICATION OF BOTTLENECKS AND REVIEW OF EARTHING SYSTEM CONFIGURATION

1. Scope of this electrical network system is to perform network modelling, review, calculate and compare relay settings and protection coordination with;
 - Original design data including i-e four type of electrical network system studies which were performed by project contractor.
 - Running plant data and new load which will be added to existing system.
2. Identification of risks and limitations associated with protection types and settings that are configured in our system (as of now).
3. Assessment of existing system to determine the levels and types of protections required for highly reliable plant (i.e. +98% reliability)
4. Recommendation over firm/final relay protection types and settings for KPD Plant based on site visit & available shut down records etc.
5. Review and validate all MV Relays, Motor Protection Relays and LV ACBs Relay settings.
6. Review and validate the generator differential relay settings.

4.1.1 IDENTIFICATION OF BOTTLENECKS/ROOT CAUSE ANALYSIS

7. In simoprime MV switchgear, all distribution transformer and MV motors are fed through fuse VCU contactors. Contractor to ensure and validate that, the new protection settings are 100% accurate and the corresponding VCU Fuse combination shall operate and isolate any fault in transformer/motor through dedicated downstream VCU/VCB.
8. Contractor to validate the installed VCU fuses selection, ratings and types according to their application and identify any improvement if required.
9. To validate the control power supply configuration scheme and associated hardware sizing and type as the LV Incomer and bus coupler control breaker tripping issue found whenever power failure occurs. Also the output breaker of control transformer of P8 and P9 panels trips even if the fault occurred in other panel/module of same MCC.
10. MCC-3, 4 & 5 consist of two bus sections and each bus section is fed through dedicated transformer which are configured through a bus coupler (ATS scheme). Protection scheme to be reviewed for the condition that if one incomer opens up on a load-side fault then the coupler should not operate to avoid tripping of the second incomer as well.
11. In MV switchgears surge protector is only installed in incoming VCB panels however it is not installed in MV soft starters and VCUs, contractor to review and identify the additional requirement of surge protector devices at MV and LV levels.
12. Provide technical insight to improve electrical equipment and power system stability and reliability and shall suggest any modification/addition of any solution to achieve uninterrupted and reliable power system.
13. Above mentioned studies are required as minimum and bidder may carry out further assessments/ studies if deemed necessary to complete the scope of work.

4.1.2 REVIEW OF EARTHING SYSTEM CONFIGURATION & PROPOSAL (IF REQUIRED).

14. At KPD-TAY plant, all Genset star points are earthed through NGR panel which are then connected to common earthing mesh (1) covering power house equipment and system earthing only. Besides this rest of plant equipment including, motors, LV MCCs, MV SWG, MV Soft starter and other structures are earthed to second earthing mesh (2). And then both meshes are also connected with each other. Whether this configuration is as per standard or not. If not, then contractor shall provide the firm solution with all necessary calculations and documentations.

4.2 ARC FLASH HAZARD ANALYSIS FOR COMPLETE POWER SYSTEM

The purpose of the analysis is to remove or mitigate known hazards and to label and provide safe work zones and Personal Protective Equipment (PPE) in compliance with National Fire Protection Association (NFPA) 70 E and develop an Incident Energy Analysis that shows available fault current at service and each piece of equipment as it goes away from the service.

1. Perform detailed Arc flash hazard study as per NEC, IEEE, NFPA, OSHA relevant standards with latest international licensed software.
2. Produce, print and install Arc flash hazard labels for each electrical asset, equipment and panels. The no of labels may be considered as 500 No for estimation but it may

vary and contractor shall be responsible for producing labels as per site requirement. The Service Provider will furnish arc flash hazard warning label information for each applicable piece of equipment in accordance with ANSI Z535.4, NEC 110.16 and NFPA 70E 130.3, UL 969 guidelines. The label information will include:

1. Voltage rating of equipment
 2. Arc flash protection boundary (in.)
 3. Arc flash incident energy at the working distance (cal/cm²)
 4. Working distance (in.)
 5. Recommended protection including glove rating
 6. Limited, restricted and prohibited approach distances (in.)
 7. Bus and protective device identifier
 8. Bolted fault current
 9. Date of issue
 10. Service Provider contact information
3. Determination of system operating modes and conditions that can impact arc flash hazard energy levels.
 4. Review protective device coordination for proper electrical system reliability and to determine if arc flash hazard energy levels can be reduced.
 5. The as built drawings are available and represent the existing facility, but are not deemed complete or accurate. It is estimated that the drawings are 95% complete however as some new load has been added which is not mentioned in attached drawing, Consultant/contractor shall have to produce such additional drawings/SLDs and to take this into account when providing project pricing.

2. PHASE-II SOW

4.3 UP GRADATION, VALIDATION AND Site Acceptance Test (SAT) AFTER INCORPORATING NEW RECOMMENDED SETTING VALUES IN PROTECTION RELAYS COMPLETE IN ALL RESPECT:

1. Contractor is required to adjust existing relay and protective device functions and settings according to the recommended settings table as provided by the coordination study after submission and final approval from OGDCL.
2. Contractor shall be responsible to perform necessary functional test after incorporation recommended setting values through automated testing instruments and no manual entries shall be allowed. Moreover, the software generated test report shall be required to submit with project completion report.
3. Since the plant is in running condition, therefore, it would be required to upgrade the relay and other device's protection settings during annual shutdown/ATA-2023 expected in September 2023, in light of final project report and recommendations. However the ATA schedule can be changed subject to the approval from Ministry and the successful bidder shall be informed two months prior to the final ATA execution. Therefore, bidder has to perform the activity without any legal bindings and incurring any additional cost at later stage.

5 PROJECT DELIVERABLES

Following is the minimum list of documents to be produced and delivered as part of work scope. Nevertheless, it is not exhaustive list and successful bidder will be required to develop comprehensive list of documents, which will be essentially required to execute SOW under this contract. However, following is the list of project deliverables document as minimum;

A) Project Report shall cover complete SOW as described in section 4. And include the following as minimum:

1. Short circuit, protective device coordination study, adequacy check, de-bottlenecking, root cause analysis and arc-flash analysis.
 2. Results of the short circuit, protective device coordination and arc flash hazard analysis studies shall be summarized in a final report. The report shall include the following sections:
 - I. **EXECUTIVE SUMMARY** including introduction, scope of work and results/ recommendations
 - II. **SHORT CIRCUIT METHODOLOGY** analysis results and recommendations, short circuit device evaluation table.
 - III. **PROTECTIVE DEVICE COORDINATION METHODOLOGY** and analysis results and recommendation.
 - IV. **PROTECTIVE DEVICE SETTINGS TABLE**
 - V. **LOAD FLOW ANALYSIS REPORT**
 - VI. **TIME-CURRENT COORDINATION GRAPHS** and recommendations
 - VII. **ARC FLASH HAZARD METHODOLOGY** analysis results and recommendation, arc flash boundary distances, working distances, incident energy levels, personal protection equipment levels.
 - VIII. **ONE-LINE SYSTEM DIAGRAM**
 - i. Shall be computer generated and will clearly identify individual equipment Buses, bus numbers used in the short circuit analysis, cable and bus connections between the equipment, calculated maximum short circuit current at each bus location, device number used in the time-current coordination analysis.
 - ii. one-line diagram showing protective device ampere ratings and associated Designations, cable size & lengths, transformer kVA & voltage ratings, motor & Generator kVA ratings, and switchgear/switchboard/panel board designations.
 - IX. **PROTECTIVE DEVICE EVALUATION**
 - i. Evaluation and comparison of equipment and protective device, comparison to short circuit ratings.
 - ii. Evaluation on the adequacy of switchgear, motor control centres, and Panel boards bus bars to withstand short circuit stresses
 - X. **COMMENTS AND RECOMMENDATIONS** for system improvements.
 - XI. **SUMMARY** including source of information and assumptions made.
- B)** Software file of all scenarios under this project.
- C)** Software network file of new SLD.
- D)** 02 sets of hard copy of complete project report
- E)** 02 sets of soft files of complete project report
- F)** If any modifications suggested in result of study, then successful bidder shall provide datasheets, specifications and red line markup drawings indicating suggested modification location having complete details required for FEED project.

G) All deliverables to be produced by successful bidder will be in English language and are subject to change if found any deficiencies or flaws that are brought to the bidder knowledge by OGDCL.

H) A copy of database electronic file that is fully compatible with arc flash and electrical system study software.

I) Provide 3 sets of colored printed hard copies and PDF soft file including system model software file.

J) Customized Written Electrical Safety Program:

Contractor will provide a customized safety program that covers all electrical safety aspects and shall define: Responsibilities of Management and Employees, Procedures to “Qualify” an Employee, Implementation and Documentation of Training Programs, Audit of Electrical Safety Procedures, Process for Issuing and Reviewing Work Permits, Process of Arc Flash Assessment (Incident Energy Analysis), Approach Boundaries for Shock/Arc, and PPEs selection and their Maintenance

K) Training

1. Training shall be provided for Plant electrical staff. Training shall be conducted at the KPD-TAY Plant conference hall and shall take place during normal business hours. Training will include following as minimum:

- I. Overview of the hazards associated with working on energized electrical equipment.
- II. Overview of the results of the Arc-Flash Study conducted.
- III. Maintenance procedures in accordance with best practices included in NFPA 70E.
- IV. Overview of the Arc-Flash labels and how to select appropriate PPE.
- V. Certificates including training material will be provided for each participant
- VI. Basic overview of power system protections and coordination

6 ESSENTIAL CRITERIA FOR BIDDER

6.1 COMPANY BACKGROUND

Only companies directly dealing in engineering studies, relay testing and commissioning as a whole and having fully owned resources in terms of licensed software, calibrated testing instruments, etc shall be allowed and shall provide a brief introduction of firm, including office locations, main areas of expertise, number of staff, and company background and history. The company shall provide proof of software/ testing instruments list with ownership proof and its validity/license document along with technical bid.

6.2 RELATED EXPERIENCE

Bidder must have relevant 10 years of experience in the field of electrical network studies. Bidder to provide a list of relevant experience similar to the scope of services requested in Section 4 above. For each project that is listed as relevant experience, please provide a list of key officials involved, schedule of project delivery covering all details.

6.3 ENGINEERING TEAM QUALIFICATION

Provide a list of team that will work on this contract. Describe the qualifications and experience of each of the proposed engineering team members. Key areas of expertise of

each team member should be identified, as well as their level of participation in the reference projects listed in section 4 above.

6.4 MANDATORY PRE-BID VISIT

A mandatory pre-proposal visit to be conducted for KPD-TAY plant, Tandojam Sindh. Plant is running so bidder must identify any bottleneck in data collection or any other prior to bid submission. The purpose of the visit is to review and clarify project requirements to bidders as any bottleneck in data collection may be identified prior to bid submission, and to respond to questions from the bidder. Pre-proposal attendees must communicate via email mentioning attendee names with CNIC 01 week prior to the site visit.

7 VALUE ADDED WORK EXCLUDING SOW

The successful engineering firm must identify any additional work, not mentioned in this Scope of Work but would be beneficial/essential for competition of scope of work in all respect for achieving the utmost reliability and stability of complete electric power system, without any additional cost to OGDCL.

8 EXCEPTION, DEVIATION AND EXCLUSION

Please mention in quote, if there are any exceptions and exclusions against this SOW.

9 ANNEXURE-1

Sr. No.	DOC. No.	Description
1	https://drive.google.com/drive/folders/1UUDfLE1xwelhTeSDOv_uWXKs-swPJv_C Files attached in Drive:	
2	1.1 Folder: Actual Relays Data And Trafo Details	Actual Relay setting data (captured during ATA 2019 from contractor & tested accordingly.)
3	1.2 Folder: Load Flow analysis	Plant Electrical Load Flow Analysis of 2016
	1.3 Folder: Motor Starting	Motor Starting Study of 2016
	1.4 Folder: Protection Coordination	Protection Coordination Study of 2016
	1.5 Short Circuit	Short Circuit Study of 2016
2	Key Single Line Diagram	Overall Power System Key Single Line Diagram
3	Single Line Diagram For MV Switchgear In Generation	Power House MV Switchgear SLD

Table 2 List of Attached Documents

NOTE: Additional docs will be provided by COMPANY on request and as per requirement of the Bidder.

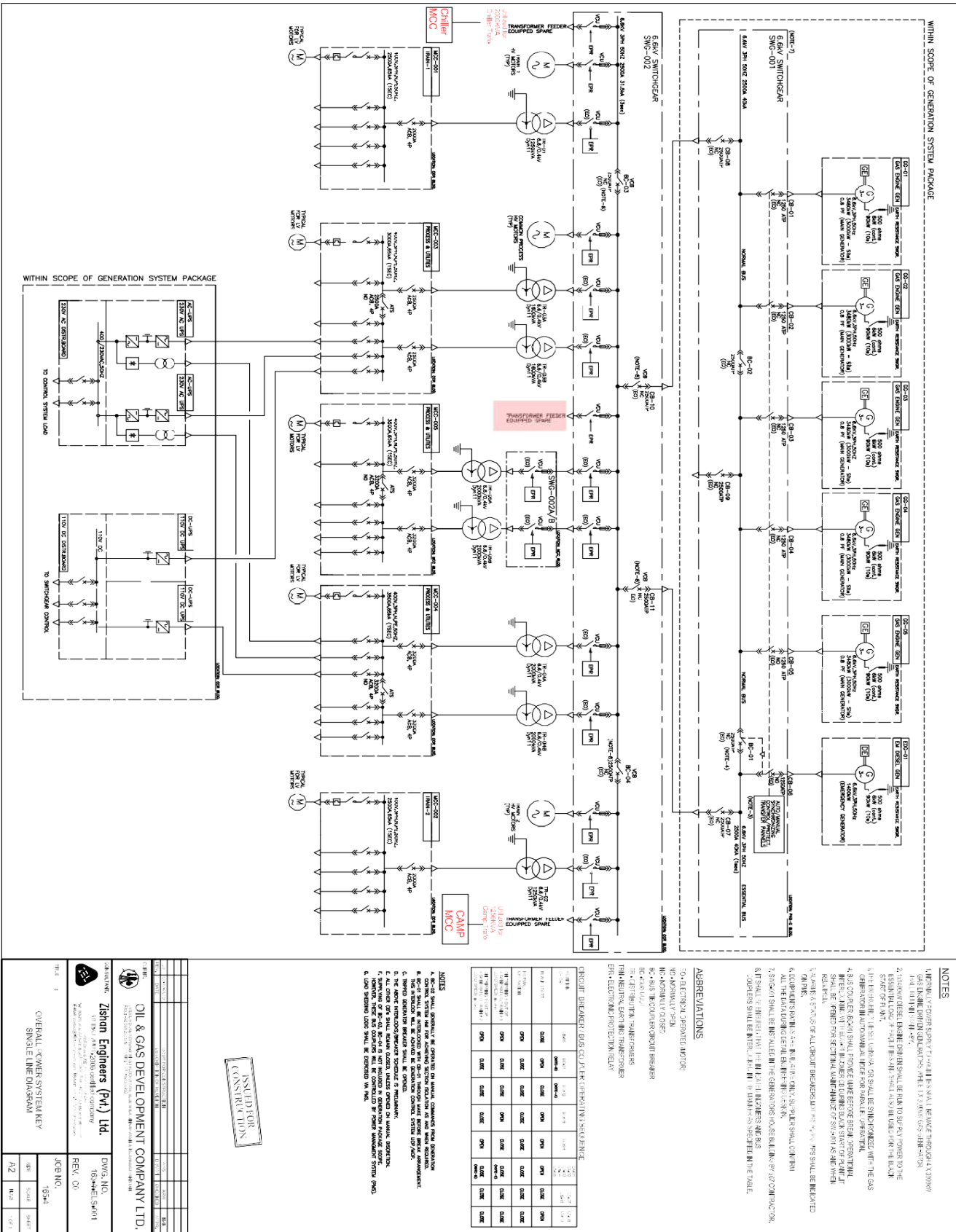
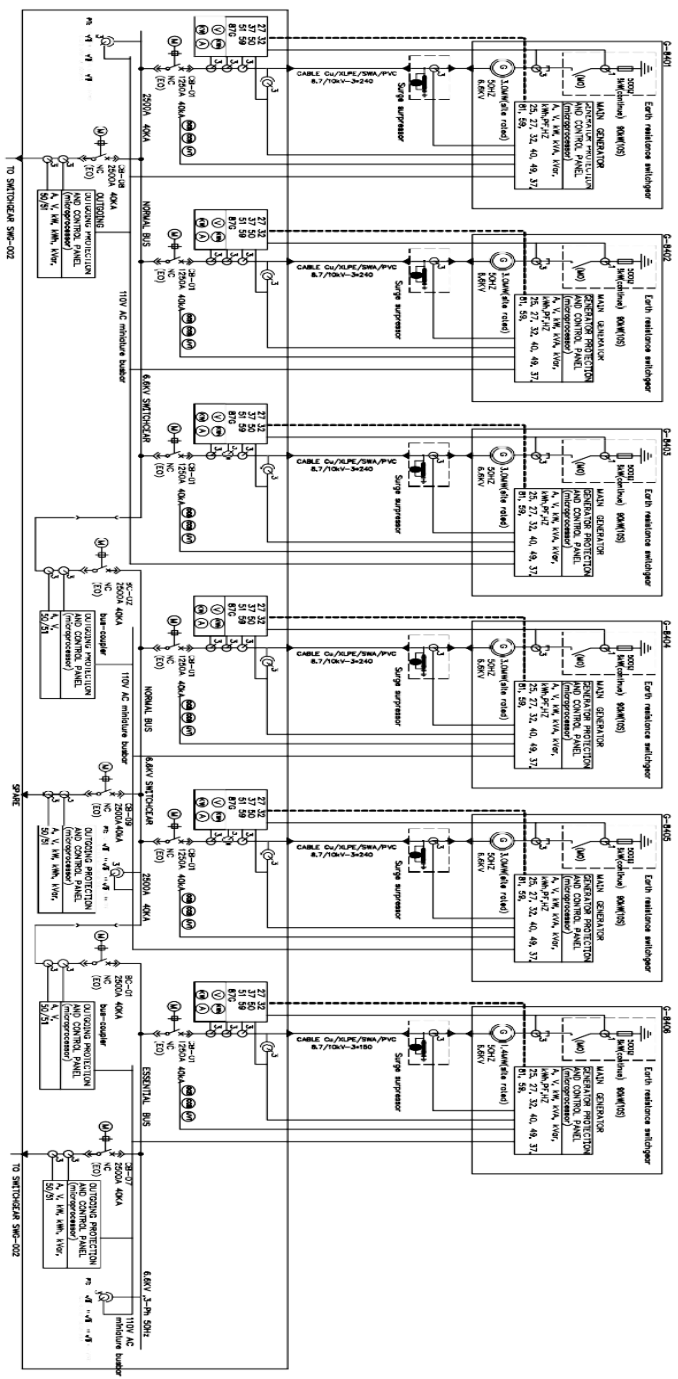


Figure 1 Plant Single Line Diagram



- ① W/ MULTIPLEXER PROTECTION DEVICE
- ② MULTIPLEXER
- ③ POWER TRANSFORMER (TWO WINDING)
- ④ GENERATOR
- ⑤ CIRCUIT BREAKER
- ⑥ MOTOR OPERATED
- ⑦ VOLTAGE TRANSFORMER (PT)
- ⑧ DISCONNECT SWITCH
- ⑨ KW METER
- ⑩ KWH/WH/1 HOUR METER
- ⑪ AMMETER
- ⑫ SELECTOR SWITCH
- ⑬ VOLTMETER
- ⑭ THREE POLE CIRCUIT BREAKER (INTERMEDIATE TYPE)
- ⑮ OPEN DEATH SWEEPER coil
- ⑯ OPEN DEATH SWEEPER coil
- ⑰ UNDER VOLTAGE coil
- ⑱ BUS TIE/TRANSFER
- ⑳ CIRCUIT BREAKER
- ㉑ BATTERY
- ㉒ RECTIFIER AND/ OR LAMPS
- ㉓ POWER FACTOR METER
- ㉔ HERTZ
- ㉕ SYNCHRONIZING CHECK RELAY
- ㉖ UNDERVOLTAGE RELAY
- ㉗ DIFFERENTIAL POWER RELAY
- ㉘ LOSS OF FIELD
- ㉙ THERMAL RELAY
- ㉚ OVERCURRENT
- ㉛ DIFFERENTIAL PROTECTIVE RELAY GROUND
- ㉜ POWER FACTOR
- ㉝ OVERCURRENT
- ㉞ OVERCURRENT
- ㉟ INDIVIDUAL OVERCURRENT RELAY
- Ⓜ OVERCURRENT (DM) RELAY

REV	DATE	DESCRIPTION OF REVISION	BY	CHKD	APPROVED
01	10-11-2014	ISSUED FOR CONSTRUCTION	WJZ	ZZ	ZZ
02	31-03-2014	FOR APPROVAL	WJZ	ZX	ZX
03	06-01-2014	ISSUED FOR APPROVAL	WJZ	ZX	ZX

PROJECT INTEGRATED MANAGEMENT PROJECT TEAM
 1000 PCH/INDIA/7/1021/2013
 SCALE: 1/2"=1'-0"
 SHEET: P13X303 07/01
 ISSUE DATE: 10-11-2014

10 GENERAL TERMS & CONDITIONS

1. Bidder shall provide the technical and financial bids each scope wise as per SOW mentioned at para 4.1. Moreover the said project shall be executed in two phases i.e Phase-1 SOW and Phase-II SOW.
2. The milestone payment shall be made partially i.e 50% of total project bid value after completion of phase 1 of SOW while remaining 50% would be made after completion of phase 2 during ATA and total project closure as approved by OGDCL (invoice duly verified by Site team).
3. Bidder to provide financial proposal against complete SOW (Phase-I and Phase-II) in single line item mentioning overall SOW single cost (Lump sum covering all aspects), as the financial evaluation would be done on total project cost basis.
4. Bidders to note that for SOW Phase-II, the ATA schedule can be changed subject to the approval from Petroleum Ministry GoP. Therefore, bidder has to perform the activity without any legal bindings and incurring any additional cost at later stage if ministry changes the schedule from September 2023 to some other date.
5. OGDCL shall provide accommodation to engineering company personnel at their camp located within the close proximity of KPD-TAY Gas Process Plant.
6. Bidder to provide list of all data, drawings, reports, documents along with technical bid that are required from OGDCL to execute all works under this project.
7. OGDCL anticipates one or more site visit of vendor for data gathering and fault record collection, relay up gradation and testing and shall provide all design studies/drawings/ testing reports.
8. OGDCL's review/approval of engineering, design and/or any other documents shall not relieve the Engineering firm from any of their responsibilities/ accountabilities and obligations under the CONTRACT/ PO.
9. OGDCL reserves the right to vet all the network and protection settings and other relevant project deliverables from consultant and if found any deviations/improvement as recommended by consultant, contractor has to review & justify without any financial impact and implement the same accordingly.
10. Equipment shall be visually inspected to collect the necessary nameplate data used in the analysis. Bidder/contractor is responsible for visual verification of this data, including transformers, switchgear and breakers, relays, direct-acting trip units, etc. Data that may not be readily accessible or may not have nameplate data such as conductors, bus way, etc. can be taken from drawings.
11. OGDCL KPD-TAY plant shall provide qualified personnel to show contractor/bidder equipment location and to open all equipment doors, locks, etc. where possible and necessary to collect nameplate data.
12. Data collection shall include the MV Generators/Switchgears/Motors/Soft starters, LV switchgears/Motors/MCCs/VFDs/Soft starters and Step-down transformer and other miscellaneous equipment.
13. Contractor firm shall provide the list of completed projects national/international and have internal safety program and up-to-date electrical safety training that includes arc flash hazards. Bidder/contractor shall have to comply with OGDCL plant/facility safety regulations during field data collection.

14. Provide 3 sets of colored printed hard copies and PDF soft file including system model software file.
15. Time line along with method statement, showing detailed breakup from award of contract till project closeout, for the execution of project to be submitted to OGDCL along with technical bid submission.
16. The contractor company should have an established quality control system and have vast experience of performing electrical network studies and must have performed same study during last three years.
17. Only automated software-based calculation and testing is required and substitution or approximation or manual entry method would not be allowed.
18. Bidder to demonstrate the capability to execute the whole SOW Phase-I and 2, and shall have their own calibrated testing instrument and valid softwares with ownership proof and moreover no any sub-contractor shall be allowed but only after the approval of OGDCL.
19. Provide a one (1) page Project Organization Chart that identifies all significant project personnel by name and their role. The chart must identify quality control/quality assurance or technical review personnel.
20. Provide one (1) page resumes and qualifications of the persons who will serve as the Project Manager and Project Engineers. The Project Manager must be an electrical engineer and shall have a minimum of 15 years of relevant experience. The Project Engineer must have a minimum of ten (10) years of similar projects experience.
21. Provide Arc Flash and NFPA 70E training with video aids to all staff at site, in two groups due to OGDCL rotation policy, after final presentation of project closeout. Training certificates shall be required for each participant.
22. Provide a proposed project timeline with covering every aspect of complete project. Timeline shall include contract award date; on-site data collection timeframe, system model development and analysis timeframe, draft report review, trainings and final report presentation.
23. Contractor to share his safety policy & follow all OGDCL safety precautions and permit to work system during execution of work.
24. Bidding procedure adopted will be single stage two envelope. Bidder to properly seal both bids & clearly mention Technical /Financial Bid on their bids separately.
25. Bid bond to be submitted with the technical bid for an amount of Rs. 60,000/-

**Incharge Electrical,
Kunnar / KPD TAY LPG Plant, OGDCL,
C/O TCS Tando Jam, Tando Jam, District Hyderabad, Sindh.
Phone No. 022-2720748
Fax No. 022-2761405
Email: icelectrical_kunnar@ogdcl.com, kunnar@ogdcl.com**