OIL & GAS DEVELOPMENT COMPANY LIMITED

TERMS OF REFERENCE (TOR)/SCOPE OF WORK(SOW)



TENDER ENQUIRY NO: PROC-SERVICES/CB/P&P-4218/2019

HIRING OF SERVICES FOR INSTALLATION AND COMMISSIONING OF DCS ALONGWITH FIELD INSTRUMENTATION

Note: Master set of tender documents (services) uploaded on OGDCL's website (<u>www.ogdcl.com</u>) is the integral part of this TOR/Tender.

<u>Annexure –A</u> <u>TERMS OF REFERENCE (TOR)/SCOPE OF WORK(SOW)</u>

1. Introduction:

Dakhni Gas Plant is being upgraded from pneumatic control system to electronic control system and a New DCS is being implemented for this purpose. However, the field instrumentation is yet to be installed and commissioned. The scope of work includes the installation and commissioning of field instrumentation, cables, junction boxes, cable glands, cable trays, conduits, testing, tagging and termination of cables at both ends. Furthermore, checking, testing and calibration and loop testing is also in the supplier scope of work. Detail of scope of work is attached.

2. Terms and Conditions:

- a) Bidder should fully comply attached scope of work.
- **b)** Bidder is responsible to provide all types of required tools, test equipment, fabrication tools, consumables, field tool kits, rigging tools, etc. which will be required to accomplish the project in the given time span.
- c) Bidder should provide the execution plan and manpower deployment plan from top to bottom level i.e. from project manager to unskilled labour.
- **d)** Security clearance and attendance of manpower deployed is in bidder scope.
- e) Bidder is responsible to provide accommodation, pick and drop and all utilities to their manpower.
- **f)** Bidder's documentary evidence of HSE policy with commitment to provide PPE, Helmet, Ear plugs and safety shoes to the skilled labor/unskilled labour at work.
- g) Deployment of first aid boxes for the labour at site.
- **h)** Bidder should have ten year of experience of performing such type of projects.
- i) Detail of projects already completed.
- **j)** Bidder should be responsible for the conduct, behavior and work production of his manpower individually and/or collectively and shall exercise administrative control over them directly.
- k) Bidder should be responsible that the manpower employed by him abide by all the safety precautions in force and comply with all such requirements as may be laid down from time to time in connection with the execution of this Contract and his employees confine themselves to the work area or areas as may be specified from time to time.
- I) In case of any dispute with regard to this contract the decision of the OGDCL representative shall be final.
- m) The Quantities mentioned in the scope of work for each activity are estimated and liable to change at any stage (decrease or omitted) during actual execution of work. The payment to be made shall be based on the actual quantity of work performed.
- **n)** Unit rates quoted by bidder shall be firm. No extra payments on account of escalation in prices due to any reason shall be admissible.
- **o)** If bidder is not mobilized within 10 days from the Service Order issuance date. Then contract will be terminated and performance bond will be encashed/confiscated.
- **p)** If Contract is terminated due to negligence, fault on the part of bidder, performance bond/ guarantee will be confiscated.
- **q)** OGDCL reserves the right to terminate the contract at any time due to any reason.

- **r)** OGDCL can terminate the contract immediately if services/ performance/ daily progress is not being satisfactory.
- s) Bidder shall have adequate experience. Bid without schedule / plan will be declared as technically non responsive.
- t) OGDCL shall have the right to terminate this CONTRACT, at any time, if the bidder is not complying with the safety procedure given by the OGDCL.

3. FINANCIAL EVALUATION CRITERIA AND FINANCIAL BID FORMAT:

- I. Financial evaluation shall be carried out on complete package basis (Group-A to G).
- **II.** Prices should be inclusive of all applicable taxes, duties, levies etc except PST.
- **III.** PST/ICT if applicable shall be borne by OGDCL at actual.
- **IV.** Lowest in all group will be considered financially qualified.

4. Financial Bid Format for All Groups:

Group-A

Installations of cable, JB's, Cable glands, cable trays and conduit, testing, tagging and termination of cables at both ends.

S. No	Description	Unit	Qty	Unit Rate (Rs) exclusive of PST/ICT	Total Price (Rs). exclusive of PST/ICT
01	Excavation and bedding, back filling etc of cable trenches complete in all respects including supply and installation of all material such as sand, cable marker, warning tape, bricks etc. handling, laying, cutting, ferruling, tagging, lugging, terminations, gladding etc of following type of instrument cables in cable trench, cable trays and conduits as required from field instrument to junction boxes and junction box to control room and remote NODE Panels in field. This shall include supply of all material and services required for complete cable laying activities such as installation of core marker tags, route markers, cable lugs, cable tagging, cable dressing with cable ties etc. at both ends of termination, complete in all aspects as per project drawing, lay outs and site requirements. This will also include laying of multi pair cables from field JB's to control room and remote NODE Panels in field. The activity includes cable laying directly buried under ground, in road crossing PVC pipe of proper diameter with supply of fine				

			1	1		
		d and baked bricks. Civil work for				
		ole duct/ trench shall also include the				
		pe of contract, supply and installation				
		RGS pipes at road crossing for passing				
cables as required at s		les as required at site and repair of				
	road to original condition is also included.					
	i	Single pair 1 X 2 X 1.5 ^{mm2} PE/ PE/				
		SWA/ PVC Over all screened,	Mtrs	17500		
		Armoured, Outer sheath black				
	ii	Two pair 2 X 2 X 1.5 ^{mm2} PE/ PE/ SWA/				
		PVC individual and Over all screened,	Mtrs	1000		
		Armoured, Outer sheath black				
	ii	Three pair 3 X 2 X 1.5 ^{mm2} PE/ PE/				
		SWA/ PVC individual Over all				
		screened, Armoured, Outer sheath	Mtrs	1200		
		black				
	iv	Six pair 6 X 2 X 1.5 ^{mm2} PE/ PE/ SWA/				
		PVC individual Over all screened,	Mtrs	2300		
		Armoured, Outer sheath black	IVIUS	2300		
	V	Twelve pair 12 X 2 X 1.5^{mm^2} PE/ PE/				
	V					
		SWA/ PVC individual Over all	Mtrs	Mtrs 11000		
		screened, Armoured, Outer sheath				
		black				
	Vi	Fiber optic Single mode core cable				
		from Remote Node panel to control	Mtrs	3000		
		room.				
	vii					
		SRU control room to New control	Mtrs	500		
		room.				
2		tallation of cable tray of size 300mm				
) X 100 ^{mm} (D) X 2^{mm} (Thick) with covers				
		ng with cross, tees, elbows, reducer,				
		unding jumper etc. (as required). It				
		ludes supply of all supports, brackets,				
	clai	mps etc. required for complete cable	Mtrs	700		
		y installation work. Scope and				
	•	cification for instrument, installation				
		d construction works document No.				
	016	52-ISP-6004 shall be preferred to carry				
		this activity.				
3	Ins	tallation of JB's, fixing glands with				
	shr	ouds and plugs etc. This shall include	Mtrs	33		
	all	the activities required for complete	IVILIS	33		
	ins	tallation.				
4	Exc	avation, back filling and compaction of	Mtrs	400		
		0 ^{mm} (W) X 500 (D) cable trench as				
		uired per instrument cable lay out.				
5		avation, back filling and compaction of	Mtrs	150		
		0 ^{mm} (W) X 1000 (D) cable trench as				
		uired per instrument cable lay out.				
L	1		1	l	I	I

6	Supply, fabrication and installation of supports for conduits including civil foundations	Lot	1	
7	Fabrication and installation of 1" G.I. conduit pipe	Mtrs	100	
8	Fabrication and installation of 2" G.I. conduit pipe	Mtrs	50	
9	Fabrication and installation of 4" G.I. conduit pipe	Mtrs	50	
Total	Price in PKR exclusive of PST/ICT:			

Detail Group-A

Installations of cables, JB's, Cable glands, cable trays and conduit, testing, tagging and termination of cables at both ends.

For all items included in Contractor scope of supply, the contractor shall submit samples first to the client and consultant for approval.

The Contractor may be asked to carry out factory inspection of the items as deemed necessary by the client/ consultant. The client/ consultant may increase/ decrease quantity or exclude completely any item from contractor scope of supply. Therefore the contractor shall seek approval from the client/ consultant prior to purchase of any equipment.

The above different type of cables has to be laid in trenches and cable trays referred as above. The cable has to be laid from field JB's to control room. In the control room these cables have to be bundled tied with cable ties tagged according to cable schedule. Each cable shall be tagged at each end to give cable No. and JB's Tag No. to which it is connected.

Short runs of cable through conduit/ trenches may require. Cables passing through conduits should not be filled over 40% for the conduit capacity. This will also apply to cables entering in control room.

• The trays mentioned in this scope mainly used for laying of single pair cable for installation above ground.

Cable tray system installation shall meet the manufacturer's instructions.

Cable tray shall be supplied in standard 10ft. Lengths.

Cable tray shall be supported on straight horizontal runs at maximum span of 10ft. and vertical cable tray runs shall be supported 5 feet maximum.

All cable tray installed outdoors or cable tray installed indoors in area of possible mechanical damage shall be fitted with vented covers secured to the trays with steel screws.

Cable trays fittings shall be of radii for the largest in the tray system.

Cable tray connectors shall be rigid straight, adjustable, or expansion type. Connections shall be installed with manufacture supplied hardware and torque to the manufacturers specifications.

Standard accessories used to supplement straight sections and fittings shall be dropouts, conduit adapters, dead-ends, dividers, cable clips, tray to box connectors, and hold, hold down hardware.

Cable tray splices shall be made so that connectors between horizontal straight sections of cable tray runs fall between the support point and the quarter point of span. Splice points shall not be made directly over support joints.

Cable trays systems shall be electrically and mechanically continuous without breaks or gaps except as shown on the drawings.

All cable systems shall be connected to the plant grounding system at intervals of 400 feet but at least one grounding in each length and at each end. Bonding jumpers, heavy duty tinned copper braid, shall be installed at all expansion connectors. All cable tray systems shall be bonded together at intervals of 40 feet and at each end.

Cable shall be secured in vertical runs of cable trays be the use of stainless steel clips. Horizontal runs of cable shall be secured thought the use of black nylon, sunlight resistant cable ties. Cable ties shall be installed every 54 inches on horizontal runs and every 18 inches on vertical runs.

All cable splicing "T" or "Y" tapping within tray shall be protected with heat shrink jackets.
 However, cable splicing shall be totally avoided in this installation.

The cable tray system shall include the following components and accessories in the sizes and quantities required for the complete job.

- a. Straight Sections
- b. Crosses and Tees
- c. Elbows-horizontal and Vertical
- d. Reducers-Straight, Right-hand and left-hand
- e. Blinds-ends
- f. Bonding Jumpers
- g. Connectors-Rigid, Adjustable and Expansion
- h. Accessories-Dropouts, Covers, conduit Adapters, hold-down Devices, Dividers, Etc.
- All tray sections and fittings shall have ends pre-punched with holes to match with the splice connector.

Detail Group-A

Installations of cables, JB's, Cable glands, cable trays and conduit, testing, tagging and termination of cables at both ends.

- Splice plates shall be fabricated of the same material as the tray and fittings. They shall be sized for application at random splice location without affecting the load capacity of tray.
- The inside of cable tray system shall present no sharp edges, burrs. Or projections which could damage insulation of the cables.
- The trays routes shall be along pipe supports and accommodate for all instruments signal cables etc.
- For cable tray installation the scope includes fabricating and making supports, leveling, fixing support along pipe tracks etc.
- The branch trays shall be properly supported with the existing structures or brackets as required with clamps.
- Repair painting shall take place before any making good on site is carried out.
- Sufficient space shall be provided and maintained around trays to permit adequate access for installing and maintaining the gas pipes/tubes.

- Brackets shall be welded to the structure of fixed with mechanical clamps.
- The contractor is responsible for the painting of steel work.
- Pulling cables into junction boxes, control panels and cabinets, glanding clamping and cutting of surplus, looming and properly tying of cables should follow standard installation practices.
- Cutting back, marking sleeving, clamping and terminating.
- Continuity and insulation testing of each field cable from field end to control room end.
- Connect cable ends to individual instruments both in field and control room per the loop drawings input output interconnection drawing etc. using proper size of lugs.
- The cable trays, conduit and control panel grounding cables have to be installed according to the detailed drawing.
- The instrument grounding cables have to be installed as shown in the drawing.
- Cable accessories shall be used to complete cabling and wiring system. These accessories include all items for satisfactory installation and operation such as connectors, clips clamps, lugs, tapes, etc.
- The conductor's sleeves or makers as well as the terminal numbering shall be clearly legible.
- The standard conductors shall be connected by means of insulated fastened lugs, the fastened being effected with the particular crimping tools which are recommended by the manufacturer for the specific lugs in use.
- All the instrumentation and control cables should be laid keeping a safe distant (12 inches) from other power cables on the same cable tray or in trenches. If the distant cannot be maintained the n physical barriers should be installed to separate the cables.
- All the cables should be neatly tagged, loomed, terminated at the both ends in the field junction boxes/instruments and in the control room panels etc.
- Specification for Instruments, Installation and Construction Works (Doc # 0162-ISP-6004) shall be referred to carry out this activity. In case of any conflict stringent/ greater shall be considered.

CABLE TERMINATIONS

- Cable terminations as required in the cable installation as detailed below:
- Single pair cable will generally be terminated at one in field junction boxes and on the other end at the field instruments and other devices.
- Multi-pair cable shall be terminated at one end in the field junction boxes and on the other end in control room marshalling cabinets.

<u>Group-B</u>

CHECKING, TESTING AND CALIBRATION OF FIELD INSTRUMENTS.

S	DESCRIPTION	UNIT	QTY	UNIT	TOTAL
NO.				RATE	PRICE

				(Rs.) exclusive of PST/ICT	(Rs.) exclusive of PST/ICT
1	Calibration / testing of control valve with	Nos.	4		
	accessories				
2	Calibration / testing of ESDV & BDV Valves	Nos.	14		
	With Accessories				
	Total Price in PKR exclusive of PST/ICT				

Detail Group-B

- 1 Bench calibration of filed instrument etc. listed above as per their ranges according to specifications and datasheets.
- 2 Calibration and testing of control valves and stroking insitu.
- 3 Insitu calibration and testing of all instrument, etc.
- 4 All other activities not stated separately but required for providing complete installation and testing.
- 5 All equipment required for calibration / testing shall be arranged by the contractor.
- 6 Specification for instrument, Installation and construction Works (Doc. # 0162-ISP-6004) shall be referred to carry out this activity. In case of any conflict stringent / greater shall be considered.
- 7 The quantities quoted in the bill vary and the rate quoted allows for such variations.

S NO	DESCRIPTION	UNIT	QTY.	UNIT RATE	TOTAL PRICE
				(Rs.)	(Rs.)
				exclusive of PST/ICT	exclusive of PST/ICT
1	Installation of temperature transmitter	Nos.	36		

<u>Group-C</u> INSTALLATION OF FILED INSTRUMENTS

	Installation of Multipoint temperature	Nos.	3	
2	Element with transmitter	1105.	5	
3	Installation of pressure Transmitter	Nos.	54	
4.	Installation of pressure indicators		12	
4. 5.	Installation of flow orifice plates	Nos. Nos.	12	
	Installation of DP flow transmitters			
6 7		Nos.	27 5	
/	Installation of DP transmitters	Nos.		
8	Installation of guided wave radar level	Nos.	17	
	transmitter		10	
9	Installation of Non-Contact type radar	Nos.	10	
	level transmitter			
10	Installation of displacer type level	Nos.	39	
	transmitter			
11	Installation of ultrasonic flow meters	Nos.	1	
12	Installation of Vertex flow meter	Nos.	2	
13	Installation of level switches	Nos.	19	
14	Installation of pressure switches	Nos.	8	
	Installation of control valves with	Nos.	4	
15	accessories (I/ P convertors, regulators,			
	gauges etc.)			
	Installation of ESDV & BDV Valves with	Nos.	14	
16	accessories (Solenoid Valve, Limit			
	Switches Etc.)			
17	Installation of Moisture Analyzer with	Nos.	2	
1/	accessories			
10	Installation of I/P Positioners on existing	Nos.	67	
18	Control Valves			
10	Installation of Solenoid Valves on	Nos.	38	
19	existing Valves			
Total P	rice in PKR exclusive of PST/ICT			
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Detail Group-C

- Positioning, leveling and fixing of field instruments on mounting stands and installation of control valves describes in above BOQ. Complete installation including installation of u clamps on pipe supports of field instruments and installation of control valves accessories etc. with nuts/bolts/gaskets & welding as shown in relevant hook-up drawings.
- 2. Transporting, positioning, leveling and fixing of field instruments directly to process equipment/piping, etc. and all other activities not detailed separately in order to provide a complete installation.
- **3.** Specification for instruments, installation and construction works (Doc. # 0162-ISP-6004) shall be referred to carry out this activity. In case of any conflict stringent /greater shall be considered.
- **4.** Instrument Hoop-up Diagram Doc # 0162-IMB-6320 to 6333 shall be referred for details regarding instrument installation activities.
- 5. The Quantities quoted in the bill will vary and the Quoted allows for such variations.

INSTALLATION OF INSTRUMENT IMPULSE LINE / INSTRUMENT AIR TUBING CONNECTION S NO DESCRIPTION UNIT QTY UNIT TOTAL RATE (Rs.) PRICE exclusive (Rs.) of PST/ICT exclusive of PST/ICT PST/ICT PST/ICT PST/ICT PST/ICT

<u>Group-D</u>

1.	Installation of ESDV and BDV with fitting,	Nos	14	
	clamps & support.			
2.	Installation of instrument air tubing for	Nos	4	
	control valves fitting clamps & support.			
3.	Installation of impulse tubing for filed	Nos	32	
	instrument (FT, DPT, PT etc.) complete			
	with fittings, clamps & supports.			
4.	Installation of impulse tubing for moisture	Nos	2	
	analyzer complete with fittings clamps &			
	support.			
Total	Price in PKR exclusive of PST/ICT			

- 1. Installation of impulse line and making connection as shown in instrument hook-ups. Provide clamps supports as required.
- 2. Completing final process and instrument connections for all instrument as mentioned above.
- 3. All other activities not detailed separately in order to provide a complete installation.
- 4. Specification for instrument, installation and construction work (Docs # 0162-IPS-60004) shall be referred to carry out this activity. In case of any conflict stringent / greater shall be considered.
- 5. Instrument hook-up diagram Doc # 0162-IPS-6320 to 6333 shall be referred for details regarding instrument installation activities.
- 6. The quantities quoted in the bill will vary and the rate quoted allows for such variations.

<u>Group-E</u>

FABRICATION AND INSTALATION OF MOUNTING SUPPORT FRO FIELD INSTRUMENTS, F&G DETECTORS AND JUNCTION BOXES

S NO	DESCRIPTION	UNIT	QTY	UNIT	TOTAL
				RATE (RS)	PRICE (RS)
				exclusive	exclusive of
				of PST/ICT	PST/ICT

1.	Fabrication and Installation of Mounting	Nos	35	
	Support for field instrument and			
	transmitters as per Typical Pipe			
	stanchion/ foundation for Instrument			
	Mounting and site requirement including			
	civil foundations or welding on steel			
	structure			
2.	Fabrication and installation of junction	Nos	33	
	boxes mounting supports as per Typical			
	Pipe Stanchion for Mounting and site			
	requirement including civil foundation or			
	welding on steel structure as applicable.			
	Total Price in PKR exclusive of PST/ICT			

- 1. Specification for instruments, installation and Construction works (Docs # 0162-ISP-6004) shall be referred to carry out this activity. In case of any conflict stringent / greater shall consider.
- 2. The quantities quoted in the bill will vary in rated quoted allows for such variation.

PRE-COMISSIONING TEST & CHECKING OF INSTRUMENT LOOPS										
S. NO.	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs) exclusive of PST/ICT	TOTAL PRICE (RS) exclusive of PST/ICT					

Group-F

	Pre-commissioning, testing			
1	and loop checks of all	Nos	250	
	installed open and closed			
	loops (Analog &Digital)			
	according to			
	writing/interconnection			
	&loop drawings. This shall			
	include all transmitter,			
	Control Valves, ESDV &			
	BDV Valves etc.			
Tota	I Price in PKR exclusive of PS	г/іст		

- 1. Very installed instrument loop shall be pre commissioned and tested according to drawing by simulating signal to ensure satisfactory operation.
- 2. This will also include ESD control, alarm and interlock loops.
- 3. Typical idea of interlocking can be learned from the P&ID.
- 4. Instrument loop diagram Doc # 0162-IMF-6380 shall be referred to detail regarding testing and checking of instrument loop.
- 5. Specification for instrument, installation and construction works (Doc # 0162-ISP-6004) shall be preferred to carry out this activity in case of any conflict stringent / greater shall be considered.\
- 6. The quantities above are for evaluation purpose only. Actually quantity shall be verified at site after approval from OGDCL/ Consultant.

Group-G INSTALLATION OF CONTROL ROOM EQUIPMENTS

S	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs)	TOTAL PRICE
NO.				exclusive of	(Rs.) exclusive
				PST/ICT	of PST/ICT

1.	Installation of DCS system and	Job	1	
1.		100	T	
	marshalling cabinet, connection for			
	all power supply and configuration /			
	interconnection is shown in control			
	room location layout # 0162-ILT-			
	6201. This job include cutting of floor			
	tiles for panels placement,			
	fabrication and installation of 4"			
	steel channel mounting brackets and			
	panel alignment.			
2.	Installation of DCS systems Remote	Job	2	
	node panel in field along with			
	vendor supplied Vortex cooler and			
	installation of air tubing required as			
	per vendor drawing and			
	documentation. Connection of all			
	power supplies and configuration /			
	interconnection of all the instrument			
	and control cable in panel are also			
	include in installation contractor			
	scope. This job include panel			
	placement in field fabrication and			
	installation of panel mounting			
	support and brackets Etc.			
3.	Installation of DCS server Cabinet,	Job	1	
	connection of all power supply and			
	configuration / interconnection is			
	shown in control room location lay			
	out # 0162-ILT-6201. This job include			
	cutting of floor tiles for panel			
	placement, fabrication and			
	installation 4" steel channel			
	mounting brackets and panel			
	alignment.			
4.	Laying, termination of control	Job	1	
	system / vendor provided cable form			
	system panel to HMI work station,			
	printer, communication switches Etc			
	in control room. This shall also			
	include laying of power and control			
	cable between control room and			
	MCC room as per specification,			
	drawing and site requirement.			
5.	Installation UPS panel as shown in	Job	1	
5.	control room location layout # 016-	100	Т	
	-			
	ILT-6201. This job includes cutting of			
	floor tiles for panel placement			
	fabrication and installation of 4"			
	steel channel mounting brackets.			

6.	Installation of redundant data server with single monitor along with all required accessories , cabling Etc.	Job	1	
7.	Redundant OPC server with single monitor along with all required accessories and cabling Etc.	Jop	1	
8.	Installation of operator console and work station as shown in control room location layout # 0162-ILT- 6201.	Nos	4	
9.	Installation of 72" screen on wall along with all power and communication / interfacing cables.	Nos	1	
10	Installation of A4 and A3 type printer along with console as shown in control room location layout # 0162- ILT-6201.	Nos	3	
Total Price in PKR exclusive of PST/ICT				

<u>Detail Group-G</u>

- 1. Specification for instrument of construction works (Doc # 0162-ISP-6004) shall be referred to carry out this activity. In case of any conflict stringent / greater shall be considered.
- 2. The above will include shifting , fixing fastening of control panels from OGDCL ware house to CCR or location of control panel leveling , of floor and all required civil / welding works.
- 3. Refer control room equipment Layout docs shown in control room location layout # 0162-ILT-6201 for location of above mention equipments.
- 4. The quantity quoted in the bill will vary and the rate quoted allows for such variation.

Note:

- i) There will be an estimated Amount Contract (i.e. payment will be made at actual)
- ii) Price shall be quoted against each activity however payment will be made as per actual against verified invoices.

5. <u>TECHNICAL EVALUATION CRITERIA:</u>

SERVICES FOR INSTALLATION / HOOKUP, CABLE LAYING, TERMINATION, INSPECTION AND TESTING AND COMMISSIONING OF INSTRUMENTATION AND ITS HOOKUP WITH CONTROL SYSTEM

EVALUATION ITEM	MAXIMUM	EVALUATION	POINT
	POINTS	COMMENTS	AWARDED
1. TECHNICAL QUALIFICATION OF THE	35		
ORGANIZATION AND EXPERIENCE & TRACK			
RECORD			
1 A. TECHNICAL QUALIFICATION	20		
a. Capabilities in Project Management	10		
/Execution as per details mentioned in SOW,			
Group- A, B, C, D, E, F & G. annex. Attached			
(Preference will be given to OIL and GAS plant			
experience)			
b. QA/QC & HSE Policy System place	4		
	4		
c. No policy and document procedure exist. d. ISO 9000 or Equivalent Certification	3		
	3		
Duly Certified			
System being instituted			
No certified system exists. e. Valid PEC Registration	3		
	3		
Valid registration			
Expired Registration			
No Registration or registration cancelled			
Total out of 20 1B. EXPERIENCE & TRACK RECORD	15		
Experience of performing the installation,	15		
testing & commissioning of field instruments			
along with associated materials along with			
the associated materials as a project and			
their hookup with DCS			
Above 3 Projects	15		
2 Projects	12		
1 Project	9		
Total out of 15			
OR			
Turnkey project of installation , testing and			
commissioning of Plant instrument and DCS			
along with field devices and all accessories			
More than 1 projects	15		
1 Project	12		
Total out of 35			
2. PROJECT SPECIFIC EXECUTION /	22		
DETAILED PROJECT SHEDULE AND RESOURCE			
DEVELOPMENT PLAN/ QUALITY OF PROJECT			
SPECIFIC QA/QC AND HSE PROCEDURES TO			
BE ADOPTED			
2A PROJECT SPECIFIC EXECUTION	11		
A. Overall Execution plan & its compliance			
with OGDCL's requirements			
a. Execution plan for individual activity			

b. Reasonableness of resource deployment		
c. Identification and mitigation of risks		
involved in the project		
d. Proposed sub-contracting arrangement &		
their capabilities assessment		
Total out of 11		
2b DETAIL PROJECT SHEDULE	5.0	
a. Coverage of main project components		
b. Realistic Overall duration as well as of		
main project components		
c. Adherence to target Schedule		
Total out of 5.0		
2C QUALITY OF PROJECT SPECIFIC QA/QC	6.0	
&HSE PROCEDURES TO BE ADOPTED	0.0	
a. Project specific QA/QC procedures		
b. QA/QC procedures encompass all phrases of the project		
c. Quality plans for sub-contractors/vendors		
d. Emergency evacuation and handling		
e. HSE Procedures		
f. Project Safety plans		
Total out of 6.0		
Total out of 22		
3. PROJECT SPECIFIC , PROJECT	8	
3. PROJECT SPECIFIC , PROJECT MANAGEMENT APPROACH/PLAN	8	
	8	
MANAGEMENT APPROACH/PLAN	8	
MANAGEMENT APPROACH/PLAN a. Proposed project man power in place monitoring & control system	8	
MANAGEMENT APPROACH/PLAN a. Proposed project man power in place	8	
MANAGEMENT APPROACH/PLANa. Proposed project man power in place monitoring & control systemb. Compliance with the scope of workc. Approach/plan of construction/	8	
MANAGEMENT APPROACH/PLANa. Proposed project man power in place monitoring & control systemb. Compliance with the scope of work	8	
MANAGEMENT APPROACH/PLANa. Proposed project man power in place monitoring & control systemb. Compliance with the scope of workc. Approach/plan of construction/ installation w.r.t receipt of equipment's material	8	
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a Droject specific presedures wirt to	
e. Project specific procedures w.r.t to	
receipt of different equipment's materials	
Total out of 7	12
6. AVAILABLE HUMAN & PHYSICAL	12
RESOURCES	
a. Human resources & their adequacy	
b. Technical support services	
c. Analyzer, ultrasonic and vortex	
flowmeter, radar level transmitters	
d. Equipment's & machinery for	
construction testing and commissioning	
e. Availability of latest master calibration	
equipment for instrument calibration with	
valid calibration certificates	
f. Capability to establish site office facilities,	
computer software & hardware systems	
Total out of 12	
7. COMMERCIAL / CONTRACTUAL	12
MATTERS AND FINANCE SOUNDNESS	
7A. Commercial/ contractual matters	4
a. Project	
b. Deviations from contractual/commercial	
requirement of the project	
Total out of 4.0	
7B. FINANCIAL SOUNDNESS	8
a. AVERAGE ANNUAL TURNOVER(5 YEARS)	4
50 million Rs. And above	4
30 to 49 Million Rs.	3
10 to 29 Million Rs.	1
b) Three(3) years audited accounts	4
a. 3 years provided	
Total out of 8	
Total out of 12	
TOTAL MAXIMUM POINTS	100
OVERALL QUALIFYING POINTS	75
	/5

6. SERVICE ORDER DURATION / COMPLETION PERIOD:

Service Order Duration:

The initial term of this Service Order shall be **Nine months** from the date of issuance of Service Order by OGDCL unless earlier terminated under the provisions hereof. Any extension in the term of Contract will be subject to mutual consent of both the parties.

Completion Period:

- a. Contract duration shall be reckoned from the date of issuance of mobilization notice issued by OGDCL's P&P Department.
- b. Contractor must complete the desired services as per TOR within Three months from the date of mobilization notice issued by OGDCL's P&P Department.
- c. Contractor must mobilize within 10 days from the date of mobilization notice issued by OGDCL's P&P Department.
- d. If services are not completed as per scope of work within three months from the date of mobilization notice issued by OGDCL's P&P Department; Then LDs will be applicable as per SECTION 12. LIQUIDATED DAMAGES of Annexure J (Draft Contract) of Master Set of tender Documents (Services) uploaded on OGDCL website.

7. BID PRICE:

- i) Bid price must be quoted in PKR otherwise the bid will be rejected.
- ii) Bid price shall be inclusive of all taxes, duties, levies, charges etc., except Provincial Sales Tax (PST)/ Islamabad Capital Territory Sales Tax (ICT) on services in Pakistan.
- iii) The prices quoted by the successful bidder (contractor) for required services shall remain firm and final throughout contract period. The price charged by the successful bidder (contractor) for required services shall not vary from the prices quoted by the service company.

(This clause shall prevail instead of Master Tender document "ITB" clause # 06 'BID PRICE')

8. PAYMENT TERMS:

- a. 100% Payment will be made as per actual work done after complete & successful installation and commissioning, testing etc. at Dakhni plant and against verified invoices along with completion certificate signed by Plant Manager Dakhni.
- b. The Quantities mentioned in the scope of work for each activity are estimated and liable to change at any stage (decrease or omitted) during actual execution of work. The payment to be made shall be based on the actual quantity of work performed.

(This clause shall prevail instead of Master Tender document "ITB" clause # 07 'PAYMENT').

9. AMOUNT OF BID BOND:

Bid Bond /Bid Security amounting to **PKR: 320,000/-** to be attached / provided with the technical bid. Please see Master Set of Tender Document for further details.

Note:-

The master set of tender documents (services) uploaded on OGDCL's website (<u>www.ogdcl.com</u>) is the integral part of this TOR.