

TENDER NO. PROC-FC/CB/P&P/DKN-2056/2017

**SUPPLY OF CONTROL VALVES AND I/P
POSITIONERS FOR DAKHNI PLANT**

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SECTION – II

MASTER SET OF PRESS TENDER DOCUMENTS-FOREIGN AVAILABLE ON OGDCL WEBSITE:
WWW.OGDCL.COM FOR REMAINING TERMS & CONDITIONS ALONG WITH ANNEXURE I.E
DATA SUMMARY SHEET, BIDDING FORM, INTEGRITY & ETHICS PACT ETC

(Note: In case of any conflict between Section I & Section II, Section I shall prevail)

TENDER NO. TENDER NO. PROC-FC/CB/P&P/DKN-2056/2017

TERMS & CONDITIONS

1. The case will be processed on single stage – two envelop bidding procedure as per PPRA Rules.
2. Bid shall remain valid for a period of 180 Days from the date of technical Bid Opening.
3. Commercial evaluation will be made on complete package. Incomplete bid will be rejected and will not be considered for evaluation. Bidders should quote for all the items in schedule of requirement.
4. The bidders are required to submit a Bid bond amounting to **USD 4000/-** or equivalent Pak rupees in shape of Bank Guarantee/pay Order upfront along with the technical bid. Any bid without bid bond shall be rejected without any right to appeal.
5. Bid Bond shall remain valid for a period of 210 Days from the date of technical Bid Opening. ***Bid Bond from RBS/NIB/SUMMIT Banks is not acceptable.***
6. OGDCL may arrange Third Party Pre-Shipment Inspection at its own cost. TPI Report issued by TPI Firms i.e. SGS/Velosi/Lloyds/TUV Austria shall be the Part of Shipping Documents.
7. Within ten (10) days of the receipt of notification of intent to award the Contract from OGDCL, the successful Bidder shall furnish a Performance Bond in the Form of Bank Guarantee (**Attachment-03**) for an amount of US\$ ten (10) percent (%) of the Contract Price as a guarantee for the due and faithful performance of the Contract. The said Performance Bond shall be valid upto Twenty Four (24) months from the date of shipment. The performance Bond shall be issued by a Pakistani Scheduled Bank or an International Bank operating in Pakistan and acceptable to OGDCL except ***RBS/NIB/SUMMIT Banks is not acceptable.*** Failure of the successful Bidder to comply with the requirements of Instruction shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Bond, in which event OGDCL may make the award to the next lowest evaluated Bidder or call for new Bids.
8. **The bidder must provide a “certificate of compliance/acceptance” (attachment # 06) of complete tender document along with the technical bid.**
9. Only those clarifications will be entertained which are received ten (10) days before technical bid opening. Any clarification received after that shall not be responded.
10. Payment will be made as per Attachment No. 02.
11. Corporate and financial information of the company needs to be submitted with the technical bid as per Attachment # 05.

PAYMENT TERMS

The payment shall be made as follow:-

- a. Ninety (90%) percent of Material LC/Purchase Order Price shall be paid by OGDCL on shipment of the complete material. The payment under the L/C shall be effected upon submission of following documents upon each shipment of material component:
 - I. Original Clean on-board ocean vessel Master bills of lading.
 - II. Original detailed invoice showing material description, quantity unit price and total price strictly in line with the Contract.
 - III. Packing list
 - IV. Certificate and list of measurements and weight gross/net.
 - V. Mill Inspection/Quality Certificate.
 - VI. Insurance declaration.
 - VII. Warranty Certificate
 - VIII. Certificate of origin.
 - IX. Third Party Inspection report/certificate issued by any one of the following (if required)
 1. M/s Lloyds.
 2. M/s SGS
 3. M/s TUV Austria
 4. M/s Velosi
- b. Ten (10%) percent of the Material LC/Purchase Order Price shall be released under the L/C upon delivery of Complete Equipments/material at Karachi Port, Pakistan and after inspection/acceptance of material confirming complete delivery upon submission of Supplier's original invoice accompanied by OGDCL certificate that the complete equipment/material has been delivered.

PERFORMANCE BANK GUARANTEE

Oil & Gas Development Company
Limited OGDCL House, Jinnah Avenue,
Blue Area, Islamabad, (Pakistan)

Dear Sir,

Ref; our Bank Guarantee No. _____ in the sum of
_____ Account _____ in consideration of you
having entered into Contract
No. _____ Dated _____ with _____ C
alled Contractor and in consideration for value received from CONTRACTOR. We hereby agree and
undertake as followings:

1 To make unconditional payment to you as called upon of (10%) ten percent of the Contract value of the contract price mentioned in the said contract, on your written FIRST and SIMPLE demand without further recourse, question or reference to CONTRACTOR or any other person in the event of default, non-performance or non-fulfillment by CONTRACTOR of his obligations, liabilities, responsibilities under the said contract of which you shall be the sole judge.

2 The accept written intimation from you as conclusive and sufficient evidence of the existence of the default or breach as aforesaid on the part of CONTRACTOR and to make payment immediately and forthwith upon receipt of your FIRST and SIMPLE written demand.

3 This Performance Bond shall remain valid and in full force and effect upto _____ or issue of statement of discharge by your authorized representative or return of original guarantee whichever is earlier.

4 DEMURRAGE DUE TO DELAY IN RECEIPT / NEGOTIATION OF ORIGINAL SHIPPING DOCUMENTS.

If clean documents are not negotiated within Negotiation Period allowed in Letter of Credit or documents are with held by Bank on account of any discrepancy:

- If the Demurrage, if any incurred due to late negotiation of the Clean Documents and paid by OGDCL will be realized from the beneficiary of L/C, by encashing this Performance Bond to the extent of demurrage amount. In case demurrage amount exceeds the total value of this Performance Bond the balance amount will be payable by the beneficiary.

1 That no grant of time or other indulgence to, amendment in the terms of the Contract by Agreement between the parties, or imposition or Agreement with CONTRACTOR in respect of the performance of his obligations under the said Agreement, with or without notice to us, shall in any manner discharge or otherwise affect this Guarantee and our liabilities and commitments there under.

2 This is an independent and direct obligation guarantee and shall be binding on us and our successors interest and shall be Irrevocable.

3 This guarantee shall not be affected by any change in the constitution of the Guarantor Bank or the constitution of the Contractor.

4 The Guarantor Bank Warrants and represents that it is fully authorized, empowered and competent to issue this guarantee.

(BANKERS)

DELIVERY PERIOD
TIME IS OF ESSENCE

SUPPLY OF EQUIPMENT/MATERIAL

The Supplier is required to deliver the complete equipment/material in **One Hundred Twenty (120) Days plus a grace period of seven (07) Days (in total not more than 127 days)** with CFR by Sea Karachi Port basis delivery from the date of establishment of letter of credit.

FORMAT OF CORPORATE & FINANCIAL INFORMATION

PART - I
GENERAL INFORMATION

1. Name (Full Company Name):
 - Postal Address :
 - Telephone:
 - Facsimile:
 - e-mail:
 - Website Address:
 - 1.1 Has the Company operated under any other name? If yes please give name, date of change and reason for change.
2. Type of Entity/Firm:
 - Corporation/Stock Company
 - Public Limited
 - Private Limited
 - Partnership
 - Proprietorship
3. Shareholders information/pattern with names and addresses of majority shareholders.
4. Place of Incorporation/Registration:
5. Year of Incorporation/Registration:
(Please provide copies of Incorporation/Registration Certificates and Memorandum & Articles of Association)
6. Company's National Tax No.
7. Company's Core Business Areas and their annual sales revenue/earnings during last five (5) years.
8. Name & Address of Owners/Directors
9. Valid Registration Certificate with Pakistan Engineering Council (PEC) where applicable.

PART - II

FINANCIAL STRENGTH

1. Provide details with regard to the financial standing of the applicant including copies of last three (3) years Audited profit & loss account and balance sheet. Also, please fill the financial summary as per below table;

S. No.	Description	Years		
		2014	2015	2016
1	Sales Revenue			
2	Paid Up Capital			
3	Profit Before Tax			
4	Profit After Tax			
5	Current Assets			
6	T. Asset			
7	Owner Equity			
8	Long Term Debt			
9	Current Liability			
10	Total Liabilities			

2. Bank(s) credit worthiness certificates (Latest Period) of applicant organization and available credit ceiling/limits with Account Number/Title.
3. Detail record with regard to litigation/arbitration proceedings or any other dispute related to project undertaken/being undertaken by the Bidder their Sub-Contractors and Suppliers (Specially with OGDCL it Joint Venture Partners or other public and private organizations working in the Oil & Gas sector of Pakistan) during past five (05) years.
4. Any information including brochures, references and other documentary evidence of technical qualification, capability and experience of the Applicant to execute the Project.

The undersigned on behalf of _____ hereby declare that the statements made and the information provided official herewith is complete, true and correct in every detail.

Signature

Official Seal of the Company

COMPLIANCE CERTIFICATE
(On official letter head)

Subject : TENDER NO. PROC-FC/CB/P&P/DKN-2056/2017 FOR SUPPLY OF CONTROL VALVES AND I/P POSITIONERS FOR DAKHNI PLANT

We have read and understood the tender documents completely and confirm total compliance with the technical and commercial requirement of the tender document.

Signed on behalf of _____

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION C

(To be completed, filled in, signed and stamped by the principal)

ANNEXURE 'A'

Material SUPPLY OF CONTROL VALVES AND I/P POSITIONERS FOR DAKHNI PLANT
Tender Enquiry No PROC-FC/CB/P&P/DKN-2056/2017
Due Date
Evaluation Criteria FULL

SCHEDULE OF REQUIREMENT

Sr No	Description	Unit	Quantity	Unit Price (FOB)	Total Price (FOB)	Unit Price C & F BY SEA	Total Price C & F BY SEA	Deviated From Tender Spec. If Any
1	100-PCV-07 , Service: Sour Gas; 4" 900#, Globe Valve, detail specification enclosed.	Number	1					
2	100-PCV-08 , Service: Sweet Gas; 4" 900#, Globe Valve, detail specification enclosed..	Number	1					
3	20-LCV-05 , Service: Water; 1.5" 300#, Globe Valve, detail specification enclosed..	Number	1					
4	40-PCV-06 , Service: Lean Amine; 6" 300#, Globe Valve, detail specification enclosed.	Number	1					
5	Current to Pressure Positioners.detail specification enclosed.	Number	3					
6	Tag No. 100-LY-01, Current to Pressure Positioner, Respective Valve Tag No. 100-LCV-01. Detailed Specification enclosed.	Number	1					
7	Tag No. 100-LY-02, Current to Pressure Positioner, Respective Valve Tag No. 100-LCV-02. Detailed Specification enclosed.	Number	1					
8	Tag No. 100-LY-03, Current to Pressure Positioner, Respective Valve Tag No. 100-LCV-03. Detailed Specification enclosed.	Number	1					
9	Tag No. 100-LY-04, Current to Pressure Positioner, Respective Valve Tag No. 100-LCV-04. Detailed Specification enclosed.	Number	1					
10	Tag No. 100-LY-05, Current to Pressure Positioner, Respective Valve Tag No. 100-LCV-05. Detailed Specification enclosed.	Number	1					
11	Tag No. 100-LY-06, Current to Pressure Positioner, Respective Valve Tag No. 100-LCV-06. Detailed Specification enclosed.	Number	1					
12	Tag No. 100-LY-07, Current to Pressure Positioner, Respective Valve Tag No. 100-LCV-07. Detailed Specification enclosed.	Number	1					
13	Tag No. 100-LY-09, Current to Pressure Positioner, Respective Valve Tag No. 100-LCV-09. Detailed Specification enclosed.	Number	1					
14	Tag No. 100-PY-01, Current to Pressure Positioner, Respective Valve Tag No. 100-PCV-01. Detailed Specification enclosed.	Number	1					
15	Tag No. 100-PY-02, Current to Pressure Positioner, Respective Valve Tag No. 100-PCV-02. Detailed Specification enclosed.	Number	1					
16	Tag No. 100-PY-03, Current to Pressure Positioner, Respective Valve Tag No. 100-PCV-03. Detailed Specification enclosed.	Number	1					
17	Tag No. 100-PY-04, Current to Pressure Positioner, Respective Valve Tag No. 100-PCV-04. Detailed Specification enclosed.	Number	1					
18	Tag No. 100-PY-05, Current to Pressure Positioner, Respective Valve Tag No. 100-PCV-05. Detailed Specification enclosed.	Number	1					
19	Tag No. 20-LY-01, Current to Pressure Positioner, Respective Valve Tag No. 20-LCV-01. Detailed Specification enclosed.	Number	1					
20	Tag No. 20-LY-02, Current to Pressure Positioner, Respective Valve Tag No. 20-LCV-02. Detailed Specification enclosed.	Number	1					
21	Tag No. 20-LY-04, Current to Pressure Positioner, Respective Valve Tag No. 20-LCV-04. Detailed Specification enclosed.	Number	1					
22	Tag No. 30-FY-01, Current to Pressure Positioner, Respective Valve Tag No. 30-FCV-01. Detailed Specification enclosed.	Number	1					
23	Tag No. 30-LY-01, Current to Pressure Positioner, Respective Valve Tag No. 30-LCV-01. Detailed Specification enclosed.	Number	1					
24	Tag No. 30-LY-02, Current to Pressure Positioner, Respective Valve Tag No. 30-LCV-02. Detailed Specification enclosed.	Number	1					

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION C

(To be completed, filled in, signed and stamped by the principal)

ANNEXURE 'A'

Material SUPPLY OF CONTROL VALVES AND I/P POSITIONERS FOR DAKHNI PLANT
Tender Enquiry No PROC-FC/CB/P&P/DKN-2056/2017
Due Date
Evaluation Criteria FULL

25	Tag No. 40-FY-05, Current to Pressure Positioner, Respective Valve Tag No. 40-FCV-05. Detailed Specification enclosed.	Number	1
26	Tag No. 50-LY-01, Current to Pressure Positioner, Respective Valve Tag No. 50-LCV-01. Detailed Specification enclosed.	Number	1
27	Tag No. 50-LY-012, Current to Pressure Positioner, Respective Valve Tag No. 50-LCV-012. Detailed Specification enclosed.	Number	1
28	Tag No. 50-LY-013, Current to Pressure Positioner, Respective Valve Tag No. 50-LCV-013. Detailed Specification enclosed.	Number	1
29	Tag No. 50-LY-02, Current to Pressure Positioner, Respective Valve Tag No. 50-LCV-02. Detailed Specification enclosed.	Number	1
30	Tag No. 50-LY-03, Current to Pressure Positioner, Respective Valve Tag No. 50-LCV-03. Detailed Specification enclosed.	Number	1
31	Tag No. 50-PY-07, Current to Pressure Positioner, Respective Valve Tag No. 50-PCV-07. Detailed Specification enclosed.	Number	1
32	Tag No. 50-TY-01, Current to Pressure Positioner, Respective Valve Tag No. 50-TCV-01. Detailed Specification enclosed.	Number	1
33	Tag No. 60-FY-03, Current to Pressure Positioner, Respective Valve Tag No. 60-FCV-03. Detailed Specification enclosed.	Number	1
34	Tag No. 60-FY-07, Current to Pressure Positioner, Respective Valve Tag No. 60-FCV-07. Detailed Specification enclosed.	Number	1
35	Tag No. 60-FY-2000, Current to Pressure Positioner, Respective Valve Tag No. 60-FCV-2000. Detailed Specification enclosed.	Number	1
36	Tag No. 60-LY-01, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-01. Detailed Specification enclosed.	Number	1
37	Tag No. 60-LY-02, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-02. Detailed Specification enclosed.	Number	1
38	Tag No. 60-LY-03, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-03. Detailed Specification enclosed.	Number	1
39	Tag No. 60-LY-05, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-05. Detailed Specification enclosed.	Number	1
40	Tag No. 60-LY-06, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-06. Detailed Specification enclosed.	Number	1
41	Tag No. 60-LY-07, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-07. Detailed Specification enclosed.	Number	1
42	Tag No. 60-LY-09, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-09. Detailed Specification enclosed.	Number	1
43	Tag No. 60-LY-10, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-10. Detailed Specification enclosed.	Number	1
44	Tag No. 60-LY-11, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-11. Detailed Specification enclosed.	Number	1
45	Tag No. 60-LY-2000A, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-2000A. Detailed Specification enclosed.	Number	1
46	Tag No. 60-LY-2000B, Current to Pressure Positioner, Respective Valve Tag No. 60-LCV-2000B. Detailed Specification enclosed.	Number	1
47	Tag No. 60-PY-007, Current to Pressure Positioner, Respective Valve Tag No. 60-PCV-007. Detailed Specification enclosed.	Number	1
48	Tag No. 60-PY-02, Current to Pressure Positioner, Respective Valve Tag No. 60-PCV-02. Detailed Specification enclosed.	Number	1
49	Tag No. 60-PY-2000, Current to Pressure Positioner, Respective Valve Tag No. 60-PCV-2000. Detailed Specification enclosed.	Number	1

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION C

(To be completed, filled in, signed
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ANNEXURE 'A'

Material SUPPLY OF CONTROL VALVES AND I/P POSITIONERS FOR DAKHNI PLANT
Tender Enquiry No PROC-FC/CB/P&P/DKN-2056/2017
Due Date
Evaluation Criteria FULL

50	Tag No. 60-TY-008, Current to Pressure Positioner, Respective Valve Tag No. 60-TCV-008. Detailed Specification enclosed.	Number	1
51	Tag No. 801-LY-01, Current to Pressure Positioner, Respective Valve Tag No. 801-LCV-02. Detailed Specification enclosed.	Number	1
52	Tag No. 806-FY-01, Current to Pressure Positioner, Respective Valve Tag No. 806-FCV-01. Detailed Specification enclosed.	Number	1
53	Tag No. 806-PY-03, Current to Pressure Positioner, Respective Valve Tag No. 806-PCV-03. Detailed Specification enclosed.	Number	1
54	Tag No. 903-LY-01, Current to Pressure Positioner, Respective Valve Tag No. 903-LCV-01. Detailed Specification enclosed.	Number	1
55	Tag No. 903-LY-02, Current to Pressure Positioner, Respective Valve Tag No. 903-LCV-02. Detailed Specification enclosed.	Number	1
56	Tag No. 903-PY-07, Current to Pressure Positioner, Respective Valve Tag No. 903-PCV-07. Detailed Specification enclosed.	Number	1
57	Tag No. 910-FY-01, Current to Pressure Positioner, Respective Valve Tag No. 910-FCV-01. Detailed Specification enclosed.	Number	1
58	Tag No. FY-3, Current to Pressure Positioner, Respective Valve Tag No. FV-4. Detailed Specification enclosed.	Number	1
59	Tag No. LY-06, Current to Pressure Positioner, Respective Valve Tag No. LV-06. Detailed Specification enclosed.	Number	1
60	Tag No. LY-09, Current to Pressure Positioner, Respective Valve Tag No. LV-09. Detailed Specification enclosed.	Number	1
61	Tag No. LY-18, Current to Pressure Positioner, Respective Valve Tag No. LV-18. Detailed Specification enclosed.	Number	1
62	Tag No. LY-90, Current to Pressure Positioner, Respective Valve Tag No. LV-90. Detailed Specification enclosed.	Number	1
63	Tag No. PY-10, Current to Pressure Positioner, Respective Valve Tag No. PV-10. Detailed Specification enclosed.	Number	1
64	Tag No. PY-33, Current to Pressure Positioner, Respective Valve Tag No. PV-33. Detailed Specification enclosed.	Number	1
65	Tag No. PY-35, Current to Pressure Positioner, Respective Valve Tag No. PV-35. Detailed Specification enclosed.	Number	1
66	Tag No. PY-41, Current to Pressure Positioner, Respective Valve Tag No. PV-41. Detailed Specification enclosed.	Number	1
67	Tag No. PY-46, Current to Pressure Positioner, Respective Valve Tag No. PV-46. Detailed Specification enclosed.	Number	1
68	Tag No. PY-51, Current to Pressure Positioner, Respective Valve Tag No. PCV-51. Detailed Specification enclosed.	Number	1
69	Tag No. TY-14, Current to Pressure Positioner, Respective Valve Tag No. TV-14. Detailed Specification enclosed.	Number	1

Note:

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1. Standard warranty and guarantee for all the items should be provided.
2. The bidder must be an authorized agent of the OEM of the valves. Original authority letter should be provided with the technical bid
3. Manufacturer should have a valid ISO 9001-2000 certification copies of the certificates to be provided with the technical bid
4. OEM technical literature for all the items should be provided with the technical bid
5. Standard test/quality control documents/certificates should be provided with the technical bid
6. Details of manufacturing facilities should be provided i.e location, layout, capacity, manpower, certifications etc
7. Tests and inspections shall be carried out at the manufacturing facility by OGDCL designated third party inspectors before shipment of material, tentative schedule of the same should be provided.
8. A minimum of seven (07) years of manufacturing experience of the same type of items is required, which should be supported with documents including a verifiable list with name and full contact details of the purchasers in Pakistan for similar type of the items, besides un-priced copy of contracts/purchase orders to be provided with the technical bid.
9. Country of origin of the material/goods, country of the manufacture and port of shipment should be provided separately.
10. All valves to be supplied must be newly manufactured and the bidder should submit a confirmation letter along with the technical bid stating that all supplied valves will be brand new. Refurbished valves will be rejected and the bidder will be penalized accordingly and blacklisted.
11. The offered items should not be obsolete within next five (05) years and a confirmation letter by OEM of the availability of the spares for next (05) years should be enclosed with the technical bid.



ENAR PETROTECH
SERVICE (PVT.) LTD.

CONTROL VALVES

DATA SHEET NO.	0162-IMA-6098
SHEET NO.	1 OF 2
DATE	28-Mar-17
REV.	1
PREPARED BY	WAS
CHECKED BY	NAS
APPROVED BY	NAS

OWNER: OIL AND GAS DEVELOPMENT COMPANY LIMITED (OGDCL)
PROJECT: DAKHNI GAS PLANT INSTRUMENT UPGRADEATION

GENERAL		20-LCV-05		40-PCV-06			
1	Tag Number			40-PCV-06			
2	Service	Water		Lean Amine			
3	Line No.	400-AM-002-1.5"-A2		400-AM-007A-6"-E2			
4	Piping Class	600#		900#			
5	Pipe Size UP / Pipe Size Down	1.5"/1.5"		6" / 6"			
6	Pipe Schedule UP / Pipe Schedule Down	160/160		-			
7	P&ID No.	E-3588-20005A (Sh. 2 of 2) (Gas Treatment System)		E-3588-40005A (Amine Regeneration System)			
8	Fluid	Water		Lean Amine			
9	State	Liquid		Liquid			
10	Condition	Minimum	Operating	Maximum	Minimum	Operating	Maximum
11	Flow Rate (lb/hr)	4	16	30	49031	147055	245116
12	Inlet Press at Flow (psig)	1100	1130	1265	1407	1407	1407
13	Dp at Flow (psi)	Note-10	947	977	1112	1398	1398
14	Temperature (°F)	77	105	130	224	224	224
15	Vapour Pressure (psia)	10.75		14.8			
16	Critical Pressure (psig)	3197		1758.2			
17	Critical Temperature (°F)	374.1		629.8			
18	Shut-off Pressure (psig)	-		-			
21	Specific Gravity Liq. at Oper. Conditions	0.981		0.981			
23	Viscosity (cP) Gas / Liquid			0.645	0.921		
24	Vapour (Wt%) / Liquid (Wt%)			100%	100%		
26	Sour Service	(Yes / No)		No	No		
27	K=CP/CV MW	1.154		18.02	1.067		
28	Calculated Cv	Max./Oper./Min.	VTC	VTC	VTC	VTC	VTC
29	Valve Body Size / Rating	Note-2	VTC / 600# RF		VTC / 900# RTJ		
30	Selected Cv	VTC		VTC			
31	Valve Type / Port	Globe / Single		Globe / Single			
32	Trim / Bearing Material	316 SS compliant		316 SS compliant			
33	Body Material	A-216 WCB Carbon Steel		A-216 WCB Carbon Steel			
34	END Connection (Inlet/Outlet)	Note-1	VTC / Flanged 600 # RF (ASME B 16.5)		VTC / Flanged 900 # RTJ (ASME B 16.5)		
35	Valve Stem Packing	VTC		VTC			
36	Control Characteristic / Rangeability	Equal Percentage / VTC		Equal Percentage / VTC			
37	Seat Material	316 SS		316 SS			
38	Plug	316 SS		316 SS			
39	Shaft	316 SS		316 SS			
40	Fail (Open / Close)	Close		Close			
41	Leakage Rate (Class to ASME FCI 70-2)	Class IV		Class IV			
42	Comply to NACE Standard	Note-9	No		No		
43	Actuator Type	Spring Diaphragm		Spring Diaphragm			
44	Actuator Size	* VTC		* VTC			
45	Air Connection Size	1/4" NPT		1/4" NPT			
46	Actuator Action	Air to Open		Air to Open			
47	Failure Action	Close		Open			
48	Available Air Supply	60 PSIG		60 PSIG			
49	Valve Duty (On/Off or Throttle)	Throttle		Throttle			
50	Type / Tag No.	Electropneumatic / 20-LY-05		Electropneumatic / 40-PY-06			
51	Enclosure Type	Aluminium / IP 65		Aluminium / IP 65			
52	Input Signal Range	4- 20 mA, 24 VDC		4- 20 mA, 24 VDC			
53	Output Signal	3-15 PSI		3-15 PSI			
54	Action	Direct		Direct			
55	Air Supply Pressure / Air Connection	60 Psig / VTC		60 Psig / VTC			
56	Air Regulator / Manufacturer	Yes / VTC		Yes / VTC			
57	Gauges	Yes		Yes			
58	Travel Stop / Handwheel / Solenoid Valve	Note-7	No		Not Required		
59	Electrical Classification / Protection	Note-8	EEx'd IIC T 4		EEx'd IIC T 4		
60	Cable Connection	Note-10	M 20 x 1.5		M 20 x 1.5		
61	NOTES:						
	1-	Flange construction shall be in accordance with ASME B16.5.					
	2-	Vendor to check selection/sizing and materials of valve and actuator and may change body size and to return one completed copy to purchaser with quotation.					
	3-	Vendor shall provide SS Tag attached with SS Screws or SS Wire. Tag shall contain Tag No. & Model No.					
	4-	Noise level shall not be above 85DB at 1 meter distance. Supplier shall provide noise solution for valve having noise level above 85DB.					
	5-	Vendor to calculate and verify the body size and valve Cv. The trim may be varied as per sizing condition.					
	6-	For flashing service hard face trim material shall be used.					
	7-	Approval for Electrical / Hazardous Area Classification shall be from CENELEC, ATEX, Factory Mutual (FM), IEC or Canadian Standards Association (CSA).					
	8-	All wetted parts shall conform to NACE MR-0175 / ISO 15156 (latest edition).					
	9-	Vendor shall provide Ex'e metallic plugs for spare electrical connection.					
	10-	Vendor to select control valve (40-PCV-06) such that it shall provide 1398 psi pressure drop at maximum opening of valve. If required a mechanical stop to be provided.					
	11-	VTC = Vendor To Confirm					

TECHNICAL DETAILS

Total Quantity: 68(for all current to pressure Positioners)

Type: Electro Pneumatic;

Mounting: Remote;

Over Pressure Limits: Twice Max Supply Pressure;

Input Signal: 4- 20 mA, 24 VDC with HART

Output Signal: 3 – 15 PSIG;

Action: Direct

Feedback: Yes;

Air Supply Pressure: 100 – 120 PSIG/35 psig;

Air Supply Connection 1/2" NPT (F)

Air Regulator / Manufacturer: Yes / VTA;

Gauges: Yes; Electrical Classification: EEx'd ' IIC T4

ENCLOSURE:

Material: Cast Aluminum;

Enclosure Protection Rating: IP 65;

Tropicalization: Yes;

Electrical Classification: EEx'd ' IIC T4.

ACCESSORIES:

SS Tag Required: Yes;

Cable Gland Required: No;

Mounting Brackets: Yes;

Manufacturer / Model Number: VTA;

Terms and Conditions:

1. Vendor shall provide SS Tag attached with SS Screws or SS Wire. Tag shall contain Tag No. & Model No.
2. Vendor shall provide accessories required to mount the transmitter on 2" Pipe Stanchion such as bracket, U Bolts for remote mounting.
3. Vendor shall provide Ex'd' metallic plugs for spare electrical connection.
4. Approval for Electrical / Hazardous Area Classification shall be from CENELEC, ATEX, Factory Mutual (FM), IEC or Canadian Standards Association (CSA).
5. VTA = Vendor To Advise



**ENAR PETROTECH
SERVICE (PVT.) LTD.**

CONTROL VALVES

DATA SHEET NO.	0162-IMA-6098
SHEET NO.	2 OF 2
DATE	28-Mar-17
REV.	1
PREPARED BY	WAS
CHECKED BY	NAS
APPROVED BY	NAS

OWNER: OIL AND GAS DEVELOPMENT COMPANY LIMITED (OGDCL)
PROJECT: DAKHNI GAS PLANT INSTRUMENT UPGRADATION

		100-PCV-07	100-PCV-08						
GENERAL	Tag Number		100-PCV-08						
	Service		Sweet Gas						
	Line No.		100-SG-202-4"-D2						
	Piping Class		600#						
	Pipe Size UP / Pipe Size Down		4" / 4"						
	Pipe Schedule UP / Pipe Schedule Down		80 / 80						
	P&ID No.		2310-PB-2053 (Sh 2 of 2) (Sweet Gas Separator Station)						
PROCESS SERVICE CONDITIONS	Fluid		Sweet Gas						
	State		Vapor						
	Condition		Minimum	Operating	Maximum	Minimum	Operating	Maximum	
	Flow Rate (lb/hr)		33967.2	56612.0	95108.2	33967.2	56612.0	95108.2	
	Inlet Press at Flow (psig)		1175	1175	1175	1160	1160	1160	
	Dp at Flow (psi)	Note-10	1125	1125	1125	800	800	800	
	Temperature (°F)		145	145	145	145	145	145	
	Vapour Pressure (psig)		-			-			
	Critical Pressure (psig)		3890.0			3890.0			
	Critical Temperature (°F)		247.3			247.3			
	Shut-off Pressure (psig)		-			-			
	Density (lb/ft ³)		4188			4188			
	Viscosity (cP) Gas / Liquid		0.015			0.015			
	Vapour (Wt%) / Liquid (Wt%)		100%			100%			
	Sour Service	(Yes / No)	Yes			No			
	K=CP/CV MW		1.513		20.62	1.513		20.62	
	Calculated Cv	Max./Oper./Min.							
	BODY	Valve Body Size / Rating	Note-2	VTC / 600# RF			VTC / 600# RF		
		Selected Cv		VTC			VTC		
		Valve Type / Port		Globe / Single			Globe / Single		
		Trim / Bearing Material		316 SS compliant			316 SS compliant		
		Body Material		A-216 WCB Carbon Steel			A-216 WCB Carbon Steel		
		END Connection (Inlet/Outlet)	Note-1	VTC / Flanged 600# RF (ASME B 16.5)			VTC / Flanged 600# RF (ASME B 16.5)		
		Valve Stem Packing		VTC			VTC		
		Control Characteristic / Rangeability		Equal Percentage / VTC			Equal Percentage / VTC		
		Seat Material		316 SS			316 SS		
		Plug		316 SS			316 SS		
		Shaft		316 SS			316 SS		
Fail (Open / Close)			Open			Open			
Leakage Rate (Class to ASME FCI 70-2)			Class IV			Class IV			
Comply to NACE Standard		Note-9	Yes			No			
ACTUATOR	Actuator Type		Spring Diaphragm			Spring Diaphragm			
	Actuator Size		* VTC			* VTC			
	Air Connection Size		1/4" NPT			1/4" NPT			
	Actuator Action		Air to Close			Air to Close			
	Failure Action		Open			Open			
	Available Air Supply		60 PSIG			60 PSIG			
	Valve Duty (On/Off or Throttle)		Throttle			Throttle			
POSITIONER	Type / Tag No.		Electropneumatic / 100-PY-07			Electropneumatic / 100-PY-08			
	Enclosure Type		Aluminium / IP 65			Aluminium / IP 65			
	Input Signal Range		4- 20 mA, 24 VDC			4- 20 mA, 24 VDC			
	Output Signal		3-15 PSI			3-15 PSI			
	Action		Direct			Direct			
	Air Supply Pressure / Air Connection		60 Psig / VTC			60 Psig / VTC			
	Air Regulator / Manufacturer		Yes / VTC			Yes / VTC			
	Gauges		Yes			Yes			
	Travel Stop / Handwheel / Solenoid Valve	Note-7	Not Required			Not Required			
	Electrical Classification / Protection	Note-8	EEx 'd' IIC T 4			EEx 'd' IIC T 4			
Cable Connection	Note-10	M 20 x 1.5			M 20 x 1.5				
61 NOTES:									
1- Flange construction shall be in accordance with ASME B16.5.									
2- Vendor to check selection/sizing and materials of valve and actuator and may change body size and to return one completed copy to purchaser with quotation.									
3- Vendor shall provide SS Tag attached with SS Screws or SS Wire. Tag shall contain Tag No. & Model No.									
4- Noise level shall not be above 85DB at 1 meter distance. Supplier shall provide noise solution for valve having noise level above 85DB.									
5- Vendor to calculate and verify the body size and valve Cv. The trim may be varied as per sizing condition.									
6- For flashing service hard face trim material shall be used.									
7- Approval for Electrical / Hazardous Area Classification shall be from CENELEC, ATEX, Factory Mutual (FM), IEC or Canadian Standards Association (CSA).									
8- All wetted parts shall conform to NACE MR-0175 / ISO 15156 (latest edition).									
9- Vendor shall provide Ex'e' metallic plugs for spare electrical connection.									
10- Vendor to restrict pressure drop of 1125 psi across the valve at maximum valve opening position. If required mechanical stop to be provided.									
11- VTC = Vendor To Confirm									