



**CNG AND CITY GAS DISTRIBUTION PROJECT  
TENDER FOR SUPPLY OF MRS AND DRS  
REPLIES TO BIDDER'S QUERIES**



**Tender No: 110269/WGKI/AGL/14-R0**

**Dated – 04.04.2011**

Sr. No.	Section / Clause No.	Tender Doc. Page No.	Clause Description	Bidder's Query	Reply / Clarifications
1.	Vol. II of II	Page 182 of 223	Approved vendor list for EVC	Pl. approve ROMET as the approved vendor for the EVC. For RPD meter, it is mentioned but EVC the same is missing. We have supplied to JPKENNY PROJECTS as well as Aavantika Gas Ltd	Tender condition prevail
2.	Vol. II of II	Page 221, 222, 223 of 223	P & ID for the metering skids - The NRV is after the ball valves	The NRV should be considered before ball valves	OK
3.	Vol. II of II	Page 220 of 223	DRS outlet pressure mentioned is 2 to 6 barg.	Pl. keep the CPRS outlet pressure 4 barg for piping designed meter size selection. Pl. keep the meter G650 or G1000 size of TM for CPRS	Refer to reply at S.No. 11
4.	Vol. II of II	88 of 233	The pressure range mentioned is 0 - 20 barg	Pl. accept the pressure range of 0.5 Barg to 6.0 Barg best suited for MDPE pipe low pressure customers.	Lower range pressure sensors are accepted.
5.	Vol. II of II		Li battery charging	Li battery provided by EVC manufacturer are with 8 years life. The battery can not be rechargeable.	OK
6.	Vol. II of II		AGA-8 calculation method	Pl. confirm that AGA-8 detailed method should be used with entering the complete Gas table rather than gross method only. data sheet mentioned detailed method, while description mentioned gross method.	AGA -8 detailed method shall be used.
7.	Vol. II of II	89 of 223	battery back up with solar charger	Pl. confirm the requirement of charging with the solar. If this feature is required separate battery with solar is required which will be fed to EVC as Alternate power source. Pl. note that the requirement should be when the battery will be replaced, the EVC should not lose its functionality and should be powered by back up battery for min 60 days.	EVC, Modem & Turbine meter for DRS shall be powered by Solar Panel.  WHILE for MRS:  1. EVC will be powered by 5 year life battery and shall have back up battery for one month life. 2. GSM will be powered by 230 V AC, but will have battery back up for 30 days.
8.	Vol. II of II	Data sheet	RPD METER turn down	Pl. confirm the turn down requirement of the RPD meters	As given in Tender Package



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TENDER FOR SUPPLY OF MRS AND DRS  
REPLIES TO BIDDER'S QUERIES**



9.	Vol. II of II	P & ID	Root isolation valves	Pl. allow to use 1/2" M X F isolation valves as root valves for 150# Metering skids	Tender condition prevail
10.	Vol. II of II	P & ID	Pressure tubeings of EVC	Pl. remove the isolation valves and do direct tubing to pressure port.	Tender condition prevail
11.	Vol. II of II	DRS sizing	The DRS outlet pressure mention is 2 to 6 barg	PI note that to optimize the DRS capacity, the should be decide at min 4 Barg. The set pressure range of the PRV can be 2 to 6 barg . Pl. confirm	Confirmed; also note, Meter sizing shall be done at 4 Bar pressure.  Piping shall be sized considering 20 m/s max. velocity.
12.	Vol. II of II	Data Sheet for EVC Page No.191 of 223 and P&ID for Type 2,3 &4	EVC will be with min 8 years battery life(Lithium Battery) where as Datasheet indicates Battery life as Min 5 years life.	EVC to be offered by us comes with alkaline batteries with min. 5 years life as a standard. Alkaline batteries are much easier and less expensive to environmentally dispose off than lithium batteries. Please confirm acceptance of the same.	Alkaline battery with minimum 5 year life Accepted.
13.	Vol. II of II	P&ID Note No. 7 for Type 2, 3 & 4	Line Sizes for MRS	We understand the Inlet and Outlet line sizes mentioned are tentative and we have to go as per the sizing calculation considering the Max Velocity of 20m/sec across entire skid. Please confirm our understanding is correct.	Bidder understanding is correct.
14.	Vol. II of II	P&ID for Type 1	Isolation Valves for PG, DPG	P&ID Indicates Globe Valves for isolation of PG/DPG. As per standard engg practice Ball valves are used for isolation of PG/DPG. Please confirm acceptance for the same.	Isolation valves shall be ball valves.
15.	Vol. II of II	P&ID for Type 1	Isolation Valves for Impulse Lines for Regulators	We understand that the impulse lines for regulator should be combination of Ball Valve and Globe Valve of 1/2" Size. Please confirm.	Bidder understanding is correct.
16.	Vol. II of II (MRS)	P&ID for Type 2,3 &4 (	NO DPG, PRV & Manual Vent across Filter for Type 2, Type 3 & Type 4	We understand that No DPG, PRV & Manual Vent is to be provided across the Filter for Type 2, Type 3 & Type 4. Please confirm our understanding.	Bidder understanding is correct.
17.	Vol. II of II	P&ID for	NO PG and CRV down	We understand that No PG and CRV is to be provided down stream	Bidder understanding is correct.



**CNG AND CITY GAS DISTRIBUTION PROJECT  
TENDER FOR SUPPLY OF MRS AND DRS  
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		Type 2,3 &4 (MRS)	stream of Filter and meter for Type 2, Type 3 & Type 4	of Filter and meter for Type 2, Type 3 & Type 4. Please confirm our understanding.	
18.	Vol. II of II	Process Data Page. No. 10 of 223 & All P&ID's (Except type 1)	The Pressure Range is from 2 - 6 Kg/cm <sup>2</sup>	The Process Parameters indicates the pressure range as 1 - 6 Barg where as the P&ID Indicates the Pressure Range as 2 - 6 Kg/cm <sup>2</sup> . Both are contradictory please clarify.	MRS - The Pressure Range is from 2 - 6 Kg/cm <sup>2</sup>
19.	Vol. II of II	P&ID	Meter Sizes	We understand that the Meter Sizes and G Ratings are Firm and have to supply as per the Rating specified in the P&ID. Please confirm our understanding.	Bidder understanding is correct
20.	Vol. II of II (DRS)	P&ID for Type 1	Straight Run Requirement	As per AGA 7 The Straight run requirement for Turbine Meter is 10D Upstream and 5D Downstream but in the P&ID additional 10D Requirement is specified before the Flow Straightner. We understand that we have to supply Turbine Meter with 10D Upstream and 5D Downstream. Please confirm our understanding.	Tender condition prevail
21.	Vol. II of II	Page 221, 222, 223 of 223	P&ID for MRS Note No. 15	We understand that the Piping Above and Below 1" Should be SCH 40 as the Max Design Pressure mentioned in the process parameters is 49 Barg. Please confirm our understanding.	No; Note 15 reads: Piping shall be SCH 40 for 1 ½ " & 2";  SCH 80 for 1" & below.
22.	Vol. II of II	Data Sheet for GSM Modem	External DC power supply with Battery Back up for 30No sun days required.	We understand that the we have to provide Solar Panel with Battery Backup to power the GSM Modem & EVC. Please confirm our understanding..	Refer to Reply to S. No. 7
23.	Vol. II of II	Datashet for Ball Valves	Reduced Bore	We understand that the Mainline Ball Valves should be Reduced bore for 300# & 150# Rating. Please confirm our understanding if correct.	Ball valves shall be full bore.
24.	Vol. II of II	Datashet for RPD Meter	Conical Strainers are required upstream of Meter	We understand that as the Meters are placed at the down stream of Filters so conical filters are not required. Please confirm our understanding.	Bidder understanding is correct



**CNG AND CITY GAS DISTRIBUTION PROJECT  
TENDER FOR SUPPLY OF MRS AND DRS  
REPLIES TO BIDDER'S QUERIES**



25.	Vol. II of II	Data sheet for Pressure Gauge	1/2" Connection for Pressure Gauge	The datasheet call for 1/2" Connection for Pressure Gauge but the P&ID Indicates 3/4" both are contradictory please clarify.	Pressure gauge connection is 1/2" while isolation valve is 3/4".
26.	Vol. II of II	Data Sheet for Turbine Meters	Accuracy Requirement	We understand that the Turbine Meters shall be Wet Calibrated with Natural Gas at 6 points close to the operating pressure so as to meet the accuracy requirement. Please confirm our understanding.	Bidder understanding is correct
27.	Vol. II of II	Data Sheet for Turbine Meters	Tender calls Tubine Meter body material as ASTM A 216 GR WCB.	We request you to accept Aluminum as MOC. Aluminum is suitable as the operating pressures are low and 150#. Aluminum is suitable and well proven for harsh environmental conditions and is light weight facilitating easy transportation as well as moment at site.	Tender condition prevail
28.	Vol. II of II	CRV Sizing		We understand that the CRV should be sized for 1% of the Flow Rate. Please confirm our understanding	Bidder understanding is correct
29.	Vol. II of II	Inspection and Testing		We understand that the Certification shall be as per 3.1 Certification. Please confirm our understanding..	Bidder understanding is correct
30.	Vol. II of II	Approved Vendor List	If the vendor wants to go to any other vendor other than those appearing in the vendor list, he has to submit PTR & Financial Status of the same for owner/consultant review before commencing procurement	We have supplied Dresser make Turbine Meters & EVC to major Gas Companies like GAIL, IGL, GSPL, SGL etc. We have supplied Dresser make EVC's to AGL also through R S Instrumentation. The relevant documents along with the PTR are attached. Request you to confirm acceptance for Dresser make Turbine Meters and EVC.	Tender condition prevail
31.	Vol. II of II	Approved Vendor List	If the vendor wants to go to any other vendor other than those appearing in the vendor list, he has to submit	We have supplied Chemtrols make Filters to major Gas Companies like GAIL, IGL etc. The relevant documents along with the PTR are attached. Request you to confirm acceptance for Chemtrols make Filter.	Tender condition prevail



**CNG AND CITY GAS DISTRIBUTION PROJECT  
TENDER FOR SUPPLY OF MRS AND DRS  
REPLIES TO BIDDER'S QUERIES**



			PTR & Financial Status of the same for owner/consultant review before commencing procurement		
32.	Vol. II of II	Vendor List	RPD Meter	Kindly Accept RPD Meter of Common. RPD meter is approved by MID/PTB Reference attached	Tender condition prevail
33.	Vol. II of II	Vendor List	EVC	Kindly accept EVC of Elgas. EVC has approval from MID/PTB reference attached	Tender condition prevail
34.	Vol. II of II	As Per P & ID	As per P& ID you ask for EVC with GSM Modem.	Please confirm	Confirmed
35.	Vol. II of II		Vendor List	Please correct the vendor list to read "Rockwin Automation" as "Rockwin Flowmeter"	Accepted
36.	Vol. II of II		EVC pressure range	As all MRS & DRS application call for pressure range at EVC / metering point 1-6 kg/cm <sup>2</sup> (G), for better accuracy it is suggested that the pressure sensor range of the EVC is chosen as 0.8 to 10 (absolute)	Lower range pressure sensors are accepted.
37.	Vol. II of II		EVC	Please confirm acceptance of separate mounting EVC, instead of integral with RPD.	Accepted
38.	Vol. II of II			For Turbine Flowmeter the standard rangeability is 20:1 & linearity / accuracy is +/- 0.5% from 20% Q <sub>max</sub> to Q <sub>max</sub> . Please confirm acceptance of same.	Accepted
39.	Vol. II of II			As EVC will be used with turbine flowmeter, only LF pulser is required. Kindly delete ./ confirm the requirement of HF pulser (Dual)	Tender condition prevail
40.	Vol. II of II			Also, Turbine Flowmeter datasheet mention, that the Flow Computer is required. However, P&ID indicates an EVC. Please reconfirm the requirement.	Flow Computer not required.
41.	Vol. II of II		PMS - 150# Ball Valves	Please confirm acceptance of flanged end ball valves for 150# application, in place of BW ball valves, as mentioned in PMS.	All the Valves of size 1" and above used in the skid shall be flanged type only.
42.	Vol. II of II			Please confirm that there are no cabinets for MRS skid.	Cabinets required, refer note 8 on P&IDs.
43.	Vol. II of II	Page 220 of 223	P&ID Type 1 for 5000 SCM <sup>H</sup> DRS	P&ID indicates two lengths of 10D & upstream flow straightner, before the turbine meter. As per standard, only one 10D upstream straightner with	Tender condition prevail



**CNG AND CITY GAS DISTRIBUTION PROJECT  
TENDER FOR SUPPLY OF MRS AND DRS  
REPLIES TO BIDDER'S QUERIES**



				19 tube bundle is sufficient, before the turbine meter. Kindly confirm acceptance of the same.	
44.	Vol. II of II		Custody transfer EVC	Please confirm custody transfer is not applicable for EVC. Same is not been certified by weights & measures authority of India. Hence please confirm custody transfer certificate is not applicable for EVC.	Accepted
45.	Vol. II of II		Turbine Meter datasheet	EVC support limited frequency (i.e. less than 1000 hz maximum). Since Turbine Meter is connected to EVC, HF pulse is not required. Please confirm.	Tender condition prevail
46.	Vol. II of II		Turbine Meter Sizing	Turbine Meter sizing shall be done at a pressure of 4 bar pressure.	Accepted
47.	Vol. II of II Clause 4.2.xvi	17 of 223	Enclosure Sheet made of 3 mm CRCS and painted with Primer & Two coats of Paint	Accept Powder Coating Instead Of Paint	Tender condition prevail
48.	Vol. II of II Clause 8.1	23 of 223	painting for piping ,Enclosure etc.	Accept Powder Coating (DFT:55 TO 100Micron)	Tender condition prevail
49.	Vol. II of II	Data sheet of EVC Page 190 of 223	Power supply of EVC	As you need 5 years battery life. pl. re confirm the type pf battery . Li battery can offer 8 years and more reliable while Alkline can offer only 3 -5 years. PI. Hence please confirm your requirement of Li Batteries.	Type of battery is vendor choice; Battery life shall be minimum 5 years.
50.	2 and 6.29 and 8.0.e	112 & 119 of 223	Specification for fire test for valve	Also Accept as per API 607 also.	Accepted
51.	Vol. II of II		All Valves shall be impact tested at 0'C .The Average Energy Absorbed shall be 35J and Min 28J	Accept All Valves shall be impact tested at 0'C .The Average Energy Absorbed shall be 28J and Min 21J	Accepted
52.	Vol. II of II	158 of 223	List of third Party inspection agency	Add one more agency ITENG ENGINEERING	Tender condition prevail
53.	Vol. II of II	166 of 223	Data Sheet of Pressure Gauge with Three Way Manifold	Accept Data Sheet of Pressure Gauge with Two Way Manifold with Vent Provision	Accepted
54.	Vol. II of II	167 of 223	Data Sheet Of Diff. Pressure Gauge	Accept Data Sheet Of Diff. Pressure Gauge 1)Accuracy:± 2.0%FSD	Accuracy Accepted Tapping as given in Data



**CNG AND CITY GAS DISTRIBUTION PROJECT  
TENDER FOR SUPPLY OF MRS AND DRS  
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			1)Accuracy:±1.5 %FSD 2)Tapping 1/2" SW	2)Tapping 1/2" SW / NPTF	Sheet
55.	Vol. II of II	174 & 175 of 223	Vender List For Ball Valve,Globe Valve & Check Valve	Pl. approve the M/s. Petro valves , Ahmedabad as in approved vendor list as the same has supplied in last projects.	Tender condition prevail
56.	Vol. II of II	194 of 223	Data Sheet of Ball Valve (2"-12" X 150#) 1)MOC Of Ball :A216 GR. WCB+0.003"EN P 2)MOC Seat Ring:AISI4140+75µENP/AISI410 3)Seat Seal: VITON 4)MOC Stem:AISI4140+75µENP/AISI410 5)MOC Stem Seal:PTFE/VITON	Accept Data Sheet of Ball Valve (2"-12" X 150#/300#) 1)MOC Of Ball :SS410 2)MOC Seat Ring:PTFE for Floating Ball Valve and SS410 For TMB type Valve 3)Seat Seal: NA for Floating Ball Valve 4)MOC Stem:Also Add SS316 5)MOC Stem Seal:PTFE/GRAFOIL.	Tender condition prevail
57.	Vol. II of II		Full Bore / Reduced Bore Ball valve	As per the datasheet ball valve shall be full bore /reduce bore. Kindly confirm the acceptance of reduced bore ball valve.	Ball valve shall be full bore.
58.	Vol. II of II		Data Sheet OF Ball Valve	Accept Data Sheet of Ball Valve (1/2" X 800#) 1)MOC Of Body & Cover :A105 2)MOC Of Ball :A351 GR CF8M+25µENP / SS316 3)MOC Seat Ring:PTFE 4)MOC Stem:SS410 / SS316 5)MOC Stem Seal:PTFE/GRAFOIL 6)End Connection: NPT Screwed end 7)Radiography is not Applicable for Forging Material A105	Tender condition prevail
59.	Vol. II of II	200 of 223	Data Sheet Globe Valve	Accept Data Sheet of Globe Valve (1/2"X800#) 1)MOC Of Body & cap :A105 2)MOC Of Disc :SS316 + Stellite 3)MOC Seat Ring:SS316 + Stellite 4)MOC Stem:SS316 / SS410 5)MOC Trim: ss316 6)End Connection: SW / NPT (MXF) 7)Radiography is not Applicable for Forging Material A105	Tender condition prevail
60.	Vol. II of II	204 of 223	Data Sheet of Check Valve 1)MOC Of Body & cap :A216 GR WCB	Accept Data Sheet of Check Valve 1)MOC Of Body & cap :A216 GR WCB 2)MOC Of Disc :SS410 / A216 GR CA15	Tender condition prevail



**CNG AND CITY GAS DISTRIBUTION PROJECT  
TENDER FOR SUPPLY OF MRS AND DRS  
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			2)MOC Of Disc :WCB 3)MOC Seat :WCB 4)MOC Hinge Pin:A105 5)MOC GASKET: Graphite 6)Air Test Pressure is require	3)MOC Seat :SS410 4)MOC Hinge Pin:SS410 5)MOC GASKET: Grafoil / Graphite 6)Air Test Pressure is not Applicable for Check Valve	
61.	Vol. II of II	191 of 223	Data Sheet Of Modem Clause:18 External DC Power Supply With Battery Back up for 30 no sun days required	Data Sheet Of Modem Clause: 18 External DC Power Supply With Battery Back up for 15 days is sufficient. It reduces the battery size. Kindly confirm its acceptance.	Tender condition prevail
62.	Vol. II of II	212 & 216 of 223	Piping Material Specification	Accept Piping Material Specification 1)Pipes:0.5"to 1.5"-sch80 and 2"to14"-SCHSTD 2)SW / THREADED Fittings: 3000# instead of 6000# 3)for ball valve,Globe Valve,Gate Valve & Plug Valve: Size: 0.5" TO 1.5" ,End Connection is NPT(MXF) and SW 4)for ball valve,Globe Valve,Gate Valve & Plug Valve: Size: 2" TO 14" ,End Connection is FLANGE ENDED	Tender condition prevail
63.	Vol. II of II	All P&ID	Isolation Valve size at Up stream of CRV and PSV	We understand that Isolation valve for CRV & PSV shall be of same size of CRV/PSV inlet size. Please confirm.	Bidder understanding is correct.
64.	Vol. II of II		Sensing Line isolation valve	All leading regulator manufacture do not recommend use of isolation valve for sensing line. If required can be provided with single 1/2' NPT ball valve. Please confirm.	Tender condition prevail
65.	Vol. II of II		3.1 certification	Please confirm only 3.1 certification is applicable for entire skid.	Confirmed.
66.	Vol. II of II	P&ID	Filter Size	Filter shall be line size only.	Bidder understanding is correct.
67.	Vol. II of II		One Laptop with each item	Single Laptop shall be provide against the 6 Nos. of DRS. Please confirm our understanding is correct.	Bidder understanding is correct.
68.	Vol. II of II		Limit Switches for Slam Shut of Valve	Kindly confirm the requirement of open /close limit switches for SSV. It shall give the feedback of the valve position and shall be use as future provision for remote monitoring.	Limit Switches required.
69.	Vol. II of II		Positioner Transmitter for Regulator	Position Transmitter shall be supplied with the regulator which is widely available with all leading	Position Transmitter for regulators not specified (as requirement).



**CNG AND CITY GAS DISTRIBUTION PROJECT  
TENDER FOR SUPPLY OF MRS AND DRS  
REPLIES TO BIDDER'S QUERIES**



				manufacturer. It shall give feedback about % opening of the regulator and shall be use as a future provision for remote monitoring.	
70.	Vol. II of II		PNGRB	As per PNGRB guidelines Regulator body shall be WCB please confirm that DI & Aluminum shall not be acceptable	PNGRB guidelines shall be followed.
71	Vol I of II		Payment terms for Supply	why suppliers money is under HOLD for not commissioning the system ? PI. accept the payment term of 100% on receipt of goods within 30 days. We will submit the PBG for 12 months from commissioning / 18 months of the supply whichever is earlier.	Tender Condition Prevail
72			Payment terms for Commissioning	PI. accept 100% on completion of work	Tender Condition Prevail
73			SOR	pl. clarify why 4 man days selected in SOR	For evaluation purpose
74	Vol II of II	5 of 233		PI. confirm the scope is limited to the supervision of the commissioning. Necessary utilities / manpower will be provided by Avantika Gas	Confirmed
75	Vol II of II	6 of 233		Freight and unloading will be charged are included in quoted prices. Please confirm.	Quoted Prices should be inclusive of both Freight & Unloading Charges.
76				As per the discussion in the pre-bid, kindly allow us to deliver first 2 DRS in a period of 12-14 weeks Ex-works. However we shall try to expedite on the delivery as per your requirement. Please confirm your acceptance.	Refer Corrigendum - 3
77				Kindly confirm the LD is applicable only on the undelivered portion & not on the entire order.	Refer Corrigendum – 3 for Revised PRS Clause