

Tender No: 110290/WGKI/GAIL GAS/32-R0

Dated – 25.02.2011

| Sr. No. | Section / Clause No. | Tender Doc. Page No. | Clause Description | Bidder's Query | Reply / Clarifications |
|---------|---------------------------|----------------------------------|---|--|---|
| 1. | | | | Freight and unloading will be charged extra at Actual. | Will be included in Quoted price. |
| 2. | Section I / IFB / 1.2.3 | 2 of 128 | Delivery Schedule | Please confirm the min qty required. The FOI min QTY and committed Qty through out the contract is required. | Tender conditions prevail; |
| 3. | Section I / IFB / 1.2.3 | 2 of 128 | Delivery Schedule | We understand that delivery period shall start from date of intimation by GAIL GAS and not from the date of FOI. Please confirm. | Yes |
| 4. | Section I / IFB / 3.0 | 3 of 128 | Scope of Work | Please confirm the scope is limited to the supervision of the job. Necessary utilities / manpower will be provided by GAIL GAS. | Yes |
| 5. | Section I / IFB / 4.0 | 4 of 128 | EMD / Bid Security | NSIC certificate will be acceptable in place of BID security | Refer Clause 14.9 of ITB Page 16 of 128 and Form F – 12 Page 95 & 96 of 128 |
| 6. | Section II / ITB / 11.2 | 13 of 128 | Bid Prices / SOR | We understand that C form will be issued. Please confirm. | No concessional form will be issued by GAIL GAS against this tender. |
| 7. | Section II / ITB / 38.0 | 22 of 128 | Performance Guarantee | Please clarify the same. IS NSIC / SSI units not required to submit the PBG? | Refer Clause 38.3 of ITB Page 22 of 128 |
| 8. | Section III / GCC / 26.0 | 40 of 128 | Price Reduction Schedule | Please imply L.D on prodata basis instead of levying it on the whole FOT value. | Tender condition prevail |
| 9. | | | SOR | Please clear on how to consider the freight for each respective destinations as the SOR doesn't, specify the same | Refer Revised SOR, which is City wise. |
| 10. | | | SOR | Please clear whether the quantity mentioned in the SOR is maximum or minimum? | Quantities specified are the tender quantities, and likely for procurement |
| 11. | Vol. II of II | Page 19 (Cl.4.2.iv) & 227 of 251 | Power supply of EVC | As you need 5 years battery life (as per P & ID - 8 years life. pl. re confirm the type pf battery . Li battery can offer 8 years and more while Alkaline can offer only 3 -5 years. Pl. confirm your requirement of Li Batteries. | Li Battery with 8 years life (Chargeable with charger) shall be provided. |
| 12. | | P&ID | Line Sizes | We understand the inlet and Outlet line sizes mentioned are not firm and we have to go as per sizing calculation considering the Max velocity of 20m/sec. Please confirm our understanding is correct. | Refer to Corrigendum 1 and Sr. No. 14 & 15 below. |
| 13. | Vol. II of II P&ID Note 8 | Page 245 of 251 | Line Sizing by Vendor (Minimum Size 1") | We understand if the Line size is less than 1" (e.g. 0.5") then a suitable Reducer of 1"x0.5" is to be provided at the header. Please confirm our understanding is correct | Tender Condition Prevails |

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| 14. | Vol. II of II P&ID | Page 245, 246, 248, 249 of 251 | Line Sizes Skid S-6, S- 8,M-3 & M-5 | We understand that if the line sizes of the mentioned skid are less than 2" we have to provide an Reducer of 2".Please confirm our understanding is correct | Bidder Understanding is Correct. |
| 15. | Vol. II of II P&ID | Page 250 of 251 | P&ID indicates a 4"x2" expander at the inlet of the skid Type-2. | We understand that if the line sizes of the mentioned skid are less than 4" we have to provide Reducer. | Bidder Understanding is Correct. |
| 16. | | P&ID | Line Size | As our understanding pipe size, line valve sizes & RPD Meter Sizes shall be as per given P&ID. If not then we shall be recommending the velocity limitation of 20 m/s before filtration and 40 m/s after filtration to design the skid inlet & outlet size. Please clarify & confirm. | Velocity for skid piping is 20m/sec.The line sizes mentioned in the P&ID is minimum. The vendor shall check the suitability to meet the process requirements. |
| 17. | | | QAP | You are requested to provide QAP. | Successful Vendor shall furnish filled QAP for Purchaser / Consultant approval. |
| 18. | | | One Laptop with each item | One laptop for each lot. | 1 laptop against total quantity of each item (with first skid shipment). |
| 19. | Vol. II of II | | Vendor List | Kindly Accept RPD Meter of Common. RPD meter is approved by MID/PTB Reference attached | Tender Condition Prevails |
| 20. | Vol. II of II | | Vendor List | Kindly accept EVC of Elgas. EVC has approval from MID/PTB reference attached | Tender Condition Prevails |
| 21. | Vol. II of II Cl.3.2.9 | Page 37 of 251 | | Please confirm calibration either natural gas or air because this will effect the delivery. | Tender Condition Prevails |
| 22. | Vol. II of II | | EN334 for regulator | EN334 Certification is not required for pressure below and equal 6 bar . We propose to accept regulator without EN certification but with certification from weight and measuring department of origin country. | Tender Condition Prevails |
| 23. | Vol. II of II Cl.3.1.6 | Page 36 of 251 | Metering station design and validate as per ISO | Pl. confirm that we have to do engg as per this tender requirement. | Tender Condition Prevails |

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| | | | 5168and EN 1776 standard | | |
| 24. | | | General Metrological requirements | Pl. accept the country of origin - like measurement Canada / Europe (EN / MID) | Tender Condition Prevails |
| 25. | Vol. II of II Cl.3.1.1 & 3.1.2 | Page 12 of 251 | Design Data - MRS/DRS - Temp | Min temp 5 deg C is mentioned is at Inlet Or Outlet? If inlet than the heater may be required to avoid condensation & moisture. Or else inlet temperature shall be 20 Deg C. | No heater is required, since the inlet temperature normally shall be around 20°C. |
| 26. | Vol. II of II Cl.4.2 xx | Page 19 of 251 | Encloser Sheet made of 16 Gauge thick CRCS and painted with Primer & Two coats of Paint | Accept Powder Coating Instead Of Paint | Tender Condition Prevails |
| 27. | Vol. II of II Cl.9.1 | Page 25 of 251 | painting for piping, Encloser etc. (DFT:20Micron) | Accept Powder Coating (DFT:55 TO 100Micron) | Tender Condition Prevails |
| 28. | Vol. II of II | Page 214 of 251 | Data Sheet of Ball Valve (2"-12" X 150#) 1)MOC Of Ball :A216 GR. WCB+0.003"E NP 2)MOC Seat Ring:AISI4140 +75µENP/AISI 410 3)Seat Seal: VITON 4)MOC Stem: AISI4140+75µ ENP/AISI410 5)MOC Stem Seal: PTFE/VITON | Accept Data Sheet of Ball Valve (2"-12" X 150#) 1)MOC Of Ball :A351 GR CF8M+25µENP / SS316 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 Prevails |
| 29. | 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 | Tender Condition Prevails |

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| | | | | <p>4)MOC Stem:SS410 / SS316 5)MOC Stem Seal: PTFE/GRAFOIL 6)End Connection: SW / NPT (MXF) 7)Radiography is not Applicable for Forging Material A105</p> | |
| 30. | Vol. II of II | Page 216 of 251 | Data Sheet Globe Valve | <p>Accept Data Sheet of Globe Valve (1/2"X800#)</p> <p>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</p> | Tender Condition Prevails |
| 31. | Vol. II of II | Page 218 of 251 | <p>Data Sheet of Check Valve</p> <p>1)MOC Of Body & cap :A216 GR WCB 2)MOC Of Disc :a105 3)MOC Seat :A105 4)MOC Hinge Pin:A105 5)MOC GASKET: Graphite 6)Air Test Pressure is require</p> | <p>Accept Data Sheet of Check Valve</p> <p>1)MOC Of Body & cap :A216 GR WCB 2)MOC Of Disc :SS410 / A216 GR CA15 3)MOC Seat :SS410 4)MOC Hinge Pin:SS410 5)MOC GASKET: Grafoil/Graphite 6)Air Test Pressure is not Applicable for Check Valve</p> | Tender Condition Prevails |
| 32. | Vol. II of II | Page 228 of 251 | Data Sheet Of Modem Clause:18 | External DC Power Supply With Battery Back up for 10 days required | Tender Condition Prevails |

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| | | | External DC Power Supply With Battery Back up for 30 no sun days required | | |
| 33. | Vol. II of II | Page 236 & 240 of 251 | Piping Material Specification 1A1 AND 3A1 | 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 Prevails |
| 34. | Vol. II of II | All P&ID | Up stream of CRV and PSV having isolation valve | Not Required | Tender Condition Prevails |
| 35. | Vol. II of II | All P&ID | All Root Valves are 3/4" Size | 1/2" size | Tender Condition Prevails |
| 36. | Vol. II of II | Vendor List | Filter manufacturer | We request you to accept Inel Gas Controls as filter manufacturer. We have supplied many filters to various gas companies. The list and other details are given in attached presentation. | Tender Condition Prevails |
| 37. | Vol. II of II | Data sheet of cartidge filter | Filter elements | Pl. accept borosilicate fibre glass as media and various suppliers like | Tender Condition Prevails |

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| | | | | SPX filtration , Khyati filtration who has PTR in various CGD | |
| 38. | | P&ID | Filter Size | Filter shall be line size only. | Accepted |
| 39. | | | EVC | Please confirm acceptance of separate mounting EVC, instead of integral with RPD. | Accepted |
| 40. | Vol. II of II | P & ID | EVC Pressure sending from the main line | Eliminate using isolation and manifolds for the Pressure sensing as it affect the metering. | Tender Condition Prevails |
| 41. | Vol. II of II | Vendor list | Instrument tubing and fittings | Pl. accept reknowned manufacture from India like Arya / waree - may be taken from EIL approved vendor list for MRS and DRS | Tender Condition Prevails |
| 42. | Vol. II of II | dry filter data sheet | Devit arm for filters - Head flange | As for MRS and DRS for specified sizes in the tender - devit arms are not required for flanges as the filter sizes are small | Davit arm not required; suitable handle shall be provided for ease of handling of QOEC (as given in Data sheet Note 2). |
| 43. | Vol. II of II | PMS | Header to all branch connections tappings are welded | Pl. allow threaded connection for header to branch - threaded for low pressure MRS | Tender Condition Prevails |
| 44. | Vol. II of II | PMS | | Please confirm acceptance of flanged end ball valves for 150# application, in place of BW ball valves. | All the Valves of size 1" and above used in the skid shall be flanged type only. |
| 45. | | | Low flow Regulators | We confirm that the pilot operated regulators offer 0% flow to 100% flow rate at very low DP @ 0.5 Barg. The same may not be stand for direct acting regulator for the accuracy asked for. Also let us know | PNGRB guidelines shall be followed. |

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| | | | | if we can use Ductile iron / cast iron body valves which we interpret that against the PNGRB guidelines. | |
| 46. | | | Accuracy of the regulators asked for 1% | Pl. note that direct acting regulators are offering accuracy 10% & more.. Where is Pilot operated valves are offering 1% and have EN334 approval. Pl. confirm which type of valves are required. Also specify min DP across the valve. | Tender Condition Prevails |
| 47. | | | Accuracy of Regulator | Please allow to quote the regulator with an accuracy of 5% for small flow rates and 2.5% for the DRS | Tender Condition Prevails |
| 48. | Vol. II of II P&ID | Page 225 & 226 of 251 | Accuracy Requirement | Generally many available models in the market have their certificates indicating accuracy of 2.5%. Please note that this accuracy figure is related to a wide range of set pressure and will be within 1% when we have specified process parameters. Hence, we request you to relax this clause to read accuracy as upto 2.5%. | Tender Condition Prevails |
| 49. | | | Pressure Regulator | Tender Specification calls for pilot operated loading type pressure regulator. Considering the low flow & flow pressure application, especially in all MRS, direct acting pressure regulators are ideally suitable & hence, confirm the acceptability of the same. | Tender condition prevails. |
| 50. | Vol. II of II | | EVC pressure range | As all MRS & DRS application call for pressure range at EVC / metering point 1-6 kg/cm ² (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 sensor are accepted. |
| 51. | | | MOC of the PCV and piping system | Pl. confirm as per the PNGRB , the min requirement of the MOC of valves and piping system is C.S. Also confirm is Cast iron and | PNGRB guidelines shall be followed. |

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| | | | | Ductile iron is acceptable. | |
| 52. | | | PNGRB | As per PNGRB guidelines Regulator body shall be WCB please confirm that DI & Aluminium shall not be acceptable. | PNGRB guidelines shall be followed. |
| 53. | | | Pressure regulators & slam shut valve | Please confirm acceptance of body material as die-cast aluminium, for all MRS applications. | Not Acceptable |
| 54. | Vol. II of II Cl.4.0 | Page 19 of 251 | Two/one self actuated control valve with integrated slamshut as indicated in P & ID. | Please confirm that separate slam shut & self actuated control valve is acceptable. | Accepted |
| 55. | | | Scope of work & Technical specification | Please confirm maximum pressure drop allowable for the entire skid for each SOR. | Tender Condition Prevails |
| 56. | | | Skid Certification | We suggest to allow us to go for 3.1 certification instead of 3.2. | Tender Condition Prevails |
| 57. | | | | Please suggest tubing and fittings from the local vendors apart from the parker and swedgelok , which are approved by Gail | Tender Condition Prevails |
| 58. | Vol. II of II | | Ball Valve Data Sheet | As per ball valve data sheet we understand that we can provide line ball valve as Reduced Bore | Ball valves shall be full bore. |
| 59. | | | Ball Valve Mounting | Please accept for 300# rating; Floating ball valves upto 6" size Trunion mounted Ball valves (TMBV) shall be provided for ball valves above 6". For 150# cloass; Trunion mounted Ball valves (TMBV) are required for sizes 8" and above. | Tender Condition Prevails |



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



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| 60. | Vol. II of II | | Vendor List | Please correct the vendor list to read "Rockwin Automation" as "Rockwin Flowmeter" | Accepted |
| 61. | Vol. II of II | | Vendor List | Please correct our name from "Daniel Instruments" to "Daniel Measurement Solutions Pvt. Ltd." | Accepted |