

**REPLY TO PRE-BID QUERIES**

BIDDING DOCUMENT NO. : MEC/23VX/01/51/D2/T03/SU/6539

SUBJECT OF BIDDING DOCUMENT : DISTRICT REGULATORY SKID (DRS), METERING REGULATORY SKID (MRS) & RPD METERS (ANNUAL RATE CONTRACT (ARC) FOR A PERIOD OF 2 YEARS)

Sl. No.	PART / Section / Clause No.	Page No.	Clause Description	Bidder's Query	Reply to Bidder's Query
1.	Part-I, IFB Invitation For Bid, Clause No. F	5 / 673	Tender Fee	From Clause F, We understand that Tender fee is not applicabel for this tender.Kindly confirm our understanding is correct.	As indicated in the Clause F of the IFB , the Tender document fee is not applicable.
2.	Part- I, Section 1.1, Clause No. A.1.1.2 (b)	15 / 673	The supplied District regulatory and metering skid to qualify above shall comprise of filtration, Pressure Reduction and Flow Meter with EVC/Flow computer with the complete skid inside cabinet enclosure. The flow meter in the supplied skid can be of Ultrasonic / Turbine / RPD type.	We understand that bidder who has completed supply of DRS /MRS / Pressure reducing, Fitratio n & Metering skid (Flow Meter with EVC/Flow Computer) of capacity which is equal or higher than the given requirement are also eligible. Kindly confirm our understanding is correct.	Bidder Understanding is correct. Also, Refer clause A.1.1.2 (c), Further, the bidder qualifying for higher Rating/Type of the meter and inlet pipe size rating of the supplied skid will be considered qualified for lower Rating/Type of the meter and inlet pipe size rating also, subject to meeting the cumulative quantity Requirement.
3.	ITB	69 / 673	Public Procurement Policy For Micro & Small Enterprises	From Clause 39.3 We understand that the bidder who has Udyam Registration certificate are also eligible to get below benefits: 1. Issue of tender document to MSEs free of cost. 2. Exemption to MSEs from payment of EMD/Bid Security. Kindly confirm our understanding is	As indicated in the tender, the Tender document fee and EMD/ Bid security are not applicable. However, Bidder shall provide the Declaration for Bid security as per Annexure – B on the letter ahead.

Sl. No.	PART / Section / Clause No.	Page No.	Clause Description	Bidder's Query	Reply to Bidder's Query
4.	Part-I, Section 3 SCC, Clause No. 4	195 / 673	Completion Schedule : Completion schedule for MRS 8 weeks and DRS 2 months	correct. Kindly note that the component delivery line Regulators, Manual valves and Meters are 12 weeks for MRS and 16-18 weeks for DRS. SO MRS delivery should be 20 weeks and DRS delivery should be 24 weeks. Kindly accept the delivery terms.	Tender Conditions Prevails
5.	Part-I, Section 3 SCC, Clause No. 1.1.1 b) & 1.1.2	201 / 673	Balance 10% (ten percent) of the supplied portion will be paid within 30 days after successful Supervision of Installation, Testing and commissioning of the units as specified in the Technical Specifications/ Material Requisition after adjustment of PRS, if any duly certified by Engineer-in-Charge (EIC). However, if the Supervision of Installation, Testing and commissioning of the system is delayed due to non availability of site clearance by Owner, this balance payment of 10% will be released by BGL after 6 months from the date of material acceptance at site, against submission of bank guarantee for equivalent amount. The BG will be valid for 12 months initially and will be extended till completion of the installation, testing and commissioning of the DRS units,	Kindly check this clause as balance 10% payment will be under hold / against the submission of PBG for the unlimited period asked. One side delivery is asked in 8 weeks and other side there is no surity of the commissioning period. Hence we request to accept the release the balance 10% payment within 30 days of receipt of the material at site irrespective of commissioning activities.	Tender Conditions Prevails.

			duly certified by Engineer-in-Charge (EIC). Such rescheduling, if any, will be intimated by EIC.		
6.	General		Annual Rate Contract With 2 Years validity & Repeat order clause.	Considering the fact that Input cost for the raw materials like Steel, Pipes & Other accessories are rapidly increasing. We request you to consider contract period of 1 Year.	Tender Conditions Prevails
7	Part-III, Annexure-III, P&ID District Regulating Skid 10000 SCMh - TM 1600	287 / 673	As per P&ID, Skid Capacity (In terms of Flow) at pressure of 4 barg is as follows: Normal - 10000 SCMh Min. - 350 SCMh Max. - 12500 SCMh	1. As per Section 1: Technical Specification (pg 221/673), Design flow shall be 100% of Maximum Flow, Hence bidders to consider 12500 SCMh as a Maximum Flow for 10000 SCMh DRS, Kindly confirm bidders understanding is correct. 2.As per Section 1: Technical Specification (pg 221/673), Minimum Flow shall be 10% of the maximum flow, Which will be 1250 SCMh & NOT 350 SCMh. Kindly confirm which process parameters to be followed for skid sizing.	Tender P & ID shall be followed
8	Part-III, Annexure-III, P&ID District Regulating Skid 10000 SCMh - TM 1600	287 / 673	As per PID, Design Temperature is -29 to 65 deg C	As per Section 1: Technical Specification (pg 221/673), Design Temperature is -20 to 65 deg C. Kindly confirm which process parameters to be followed skid sizing.	Tender P & ID shall be followed

9	Part-III, Annexure-III, P&ID District Regulating Skid 10000 SCMH - TM 1600	287 / 673	As per PID, Note 10: Velocity: a) Before Filtration Velocity shall be 20 m/s maximum b) After Filtration Velocity shall be 30 m/s maximum	As per Section 1: Technical Specification (Page 217/673) Point no. 3.3.4, Velocity of the gas remains within 30 m/s throughout the skid. Kindly confirm which velocity limitation to be followed.	The skid is to be designed by considering velocity of 20 m/s before filter & 30 m/s after filter as per P & ID. All the sizes indicated in the PID are minimum requirements which shall be adhered to. However if higher sizes are required than indicated in the PID, the same will be applicable to meet the design and operating conditions and statutory regulations without any additional cost and time during detailed engineering.
10	Part-III, Annexure-III, P&ID District Regulating Skid 10000 SCMH - TM 1600	287 / 673	As per PID, Outlet Class shall be 150#	As per Section 1: Technical Specification (Page 218/673) Point no. 3.3.6, All the connections in the skid having design rating of 300# shall be of welded type only. As per P&ID, Pressure rating at the outlet of the skid is 150#. Kindly confirm the pressure rating at outlet of the skid.	Tender Conditions Prevails.
11	Part-III, Annexure-III, P&ID District Regulating Skid 10000 SCMH - TM 1600	287 / 673	As per PID, Skid Quantity - 04 nos.	As per Material Requisition, Skid quantity is 1 nos for 10000 SCMH. Kindly Confirm the correct quantity.	Skid Quantity shall be as per Material requisition and Price schedule shall be followed
12	Part-III, Annexure-III, P&ID	288 / 673	Skid Capacity at pressure of 4 barg - 5000 SCMH	1. As per Section 1: Technical Specification (pg 221/673), Design	Tender P & ID shall be followed

	District Regulating Skid 5000 SCMH - G1000			flow shall be 100% of Maximum Flow, Hence bidders to consider 5000 SCMH as a Maximum Flow. 2.As per Section 1: Technical Specification (pg 221/673), Minimum Flow shall be 10% of the maximum flow, Which will be 500 SCMH. Kindly confirm which process parameters to be followed for skid sizing.	
13	Part-III, Annexure-III, P&ID District Regulating Skid 5000 SCMH - G1000	288 / 673	Design Temperature is -29 to 65 deg C	1. As per Section 1: Technical Specification (pg 221/673), Design Temperature is -20 to 65 deg C. Kindly confirm which process parameters to be followed skid sizing.	Tender P & ID shall be followed
14	Part-III, Annexure-III, P&ID District Regulating Skid 5000 SCMH - G1000	288 / 673	Note 10: Velocity: a) Before Filtration Velocity shall be 20 m/s maximum b) After Filtration Velocity shall be 30 m/s maximum	As per Section 1: Technical Specification (Page 217/673) Point no. 3.3.4, Velocity of the gas remains within 30 m/s throughout the skid. Kindly confirm which velocity limitation to be followed.	The skid is to be designed by considering velocity of 20 m/s before filter & 30 m/s after filter as per P & ID. All the sizes indicated in the PID are minimum requirements which shall be adhered to. However if higher sizes are required than indicated in the PID , the same will be applicable to meet the design and operating conditions and statutory regulations without any additional cost and time during detailed engineering.

15	Part-III, Annexure-III, P&ID District Regulating Skid 5000 SCMH - G1000	288 / 673	As per PID, Outlet Class shall be 150#	As per Section 1: Technical Specification (Page 218/673) Point no. 3.3.6, All the connections in the skid having design rating of 300# shall be of welded type only. As per P&ID, Pressure rating at the outlet of the skid is 150#. Kindly confirm the pressure rating at outlet of the skid.	Tender Conditions Prevails.
16	Part-III, Annexure-III, P&ID District Regulating Skid 5000 SCMH - G1000	288 / 673	As per PID, Skid Quantity - 04 nos.	As per Material Requisition, Skid quantity is 1 nos for 5000 SCMH. Kindly Confirm the correct quantity.	Skid Quantity shall be as per Material requisition and Price schedule shall be followed.
17	Part-III, Annexure-V, QAP	296 / 673	Tender QAP	Kindly Review the tender QAP document. No requirement mentioned as such in any of the QAP. Kindly confirm whether bidder to submit their QAP As per Section 1: Technical Sepcification (Page 222/673) Point no. 6, For Mecon's Review & Approval. Inspection Shall be EN 10204 Type 3.1 for pressure parts and Type 2.2 for other parts.	Tender Conditions Prevails.
18	General	-	Technical Specification	Kindly provide piping material Specification applicable for the project.	Please refer the tender P&ID of the respective MRS and DRS skids for piping material specification.
19	Part-III, Annex III, Datasheet for Filter	280 / 673	QEC Make	We request you to kindly accept Veekay Vikram make for the QOEC.	Tender Conditions Prevails.

20	Part-III, Annex III, Datasheet for RPD Meter	247/673	Datasheet for RPD meter: Pulse output: Minimum one no. of LF Pulse and one no. of HF pulse signal from RPD meter (complying with EN12480) for volume correction	We offer HF EVC with the meters and EVC is an integral to Meter. BGL is using the same meter and EVC more than 60nos. Kindly accept.	Minimum one no of HF pulse is mandatory and additionally one no. LF/HF pulse is preferable.
21	Part-III, Annex III, Datasheet for Electronic Volume Corrector	249/673	Electronic Volume Corrector: Outputs: One no. RS 485 dedicated port with Intrinsically safe Barrier and required interfacing cables (between barrier & EVC) shall be provided for interfacing with Remote communication like SCADA.	We will offer one no. of RS 485 port both for local / remote communication. EVC will work for one type of communication at a time Remote / local. Kindly accept the same.	Noted and shall be taken up during detail engineering.
22	Part-III, Annex III, Datasheet for Electronic Volume Corrector	249/673	Electronic Volume Corrector Outputs: One no. dedicated port for Connectivity to PC/Laptop for EVC configuration. Communication cable with adaptor for connecting the EVC with laptop shall be supplied by bidder, for each EVC	We will offer one no. of RS 485 port both for local / remote communication. EVC will work for one type of communication at a time Remote / local. Kindly accept the same.	Noted and shall be taken up during detail engineering.
23	Part-III, Annex III, Datasheet for Electronic Volume Corrector	250/673	Electronic Volume Corrector: Power supply: Internal Battery along with mounting hardware, if any Lithium / Alkaline Battery (3 years minimum life) Battery pack should be intrinsically safe and replaceable in Field itself, without memory loss. No separate power supply will be provided.	Normal industry practice is Li battery with 10 years battery life, Kindly review and confirm this requirement.	As per TS, the minimum requirement is 3 yrs of battery life. Better battery life is acceptable.

24	Part-III, PSV & Relief valve datasheet	280 / 673	Code : API 520 and 526	As per PNGRB T4S, It is specified that the flow capacity 1% for the CRV, by specifying API 520/ 526 it will not comply the PNGRB guidelines. Hence you are requested to accept Back Pressure type regulators for CRV.	Tender Prevalis. Conditions
25	Part-III, Annexure-IV, List of Vendors for Bought out items	292 / 673	Vendor list For Ball valve	Kindly accept and consider following additional reputed vendors for the ball valve, same are already listed with Tractebel / Mecon Delhi / IOCL etc: 1. M/s. Hawa valves (India) Pvt. Ltd., Navi Mumbai 2. M/s. Oswal Industries limited 3. M/s. Steelstrong	Tender Prevalis. Conditions
26	Part-I, IFB Invitation For Bid, Clause No. 2 (F) & (N)	5 & 6 / 673	Tender Fee	As per the clause (F) Tender fee is not applicable, however in Clause (N) tender processing fee is mentioned.  We understand that tender / processing fee is not applicable for this tender. Please confirm.	As indicated in the CI No (F), the tender document fee is not applicable.  However, as indicated in the CI No (N), the <b>tender processing fee</b> (Non-Refundable) of Rs. 1770/- (Including GST@18%) is applicable (Payable to M/s ITI Ltd. Online.)
27	Part-I, BEC-Technical Criteria, Clause B	15 & 16/673	Technical Criteria for Part C (Rotary Positive Displacement meters)	Ultrasonic Flow meter is accepted as per tender Clause A(1.1.2(b)), and further we understand that, technical criteria of RPD meter will also be applicable for Ultrasonic Flow meter for qualifying the BEC. Kindly confirm	PART C is applicable for RPD Meter only. Tender Clause prevails.
28	Part-I, BEC-Technical Criteria, Clause B (1.2.3)	16/673	In case of Indian subsidiary, manufacturing facility of their foreign Manufacturer from which	We understand that Indian Bidder manufacturing facility shall be certified by a Inspection / testing	Bidder to refer Tender Clause no. 1.2.2(Page 15 & 22)



			the quoted Natural Gas RPD meter proposed to be supplied, shall be certified by a reputed Inspection / testing agency such as CEIL/ Lloyds/ BV/ DNV/ TUV/ ABS/ Moody/ SGS/ GLI / Velosi / FCRI / DVGW or Equivalent, for fabrication, assembly and testing.	agency such as CEIL/ Lloyds/ BV/ DNV/ TUV/ ABS/ Moody/ SGS/ GLI / Velosi / FCRI / DVGW. As complete skid will be fabricated, assembled & Tested at Indian Bidder facility.  USM / Turbine / RPD Foreign manufacturer shall provide ISO 9001 certification of the manufacturing facility. Please confirm.	applies for Indian Manufacturer and Tender Clause no. 1.2.3(Page 15 & 22) applies for Indian subsidiary of foreign manufacturer.  Tender Clause prevails.
29	Part –III, Section-4, Clause no.1 General	206/673	This specification together with .....and RPD Meter Based above ground Skid mounted twin stream Metering Regulatory Skid (MRS) mounted inside Cabinet for Metering Regulating Station along with all accessories for various site/ location and capacities as per the typical P & ID, Technical specifications, datasheets provided in the bid document.	Ultrasonic Flow meter is mention in BEC but tender specification calls for RPD meter. We request mecon to provide the specification for ultrasonic flow meter for complying.	As per TS the requirement is for RPD Meter & Turbine Meter only. TS for the same is provided.
30	Part –III, Section-4, Clause no.2.2 (J)	210/673	All installation and erection .....all type of consumables and accessories for mounting of instruments, instrument supports, tray supports, canopies/sunshields for all field mounted instruments.	Complete skid is mounted in weather proof cabinet/canopy, hence additional requirement for canopies / sunshield for instruments is not requisite. Please confirm.	Tender Conditions Prevails
31	Part –III, Section-4, Clause no.3.3.10	218/673	All the skid cabinets shall be provided with suitable louvers in order to prevent pressure build-up inside the cabinet due to entrapped gas in the cabinet.	We understand that considering 5% louvers of total surface area to be considered. Please confirm.	Tender Conditions Prevails

32	Part –III, Section-4, Clause no.10.2	227/673	The VENDOR shall furnish a guarantee for the entire skid package comprising of all of its component/ equipments including instruments, piping, valves, fittings, internals, etc., for a period of 12 months from the date of commissioning or 24 months from the date of receipt at CLIENT store/ site, whichever is earlier.	We request Mecon to accept the guarantee for the entire skid for a period of 12 months from date of commissioning or 18 months from date of receipt at client store / site, whichever is earlier.	Tender Conditions Prevails
33	Part –III, Section-4, Clause no.3.3.4	217/673	The complete station shall be designed in such a way that the mean gas velocity remains within 30 Meter per second except in Pressure regulating valve / slam shut valve. Velocity in the piping upstream / downstream of Pressure reduction station shall be within 30 Meter per second. Maximum seat velocity of Slam shut valves is limited to 40 meter / second. Materials selected should be suitable to prevent erosion at such high velocities and the allowable sound pressure values should not be exceeded.Each stream shall be designed for 100 % of the maximum flow capacity.	Both the clause are contradicting. Kindly confirm the velocity limitation for skid design.	Refer P & ID of respective MRS & DRS skids. The skid is to be designed by considering velocity of 20 m/s before filter & 30 m/s after filter. All the sizes indicated in the PID are minimum requirements which shall be adhered to. However if higher sizes are required than indicated in the PID , the same will be applicable to meet the design and operating conditions and statutory regulations without any additional cost and time during detailed engineering.
34	Part –III, Section-4, P&ID Note-10	285 to 288/673	Velocity before filtration shall be 20 m/s		

35	Part –III, Section-4, P&ID	285 to 288/673	Inlet & Outlet Size	Inlet & outlet size of skid piping / instruments / meter etc are fixed or we have to consider same as per the velocity limits. Please confirm.	The skid is to be designed by considering velocity of 20 m/s before filter & 30 m/s after filter. All the sizes indicated in the PID are minimum requirements which shall be adhered to. However if higher sizes are required than indicated in the PID , the same will be applicable to meet the design and operating conditions and statutory regulations without any additional cost and time during detailed engineering.
36	General			We understand that any material/product (mainly sourced from china) which will be used to “manufacture metering skid or part of metering skid” is acceptable to BGL. Please confirm.	Refer Corrigendum -1
37	DS No: MEC/23VX/01/E5/D2/ DRS&MRS/FC/0501(TECHNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)	Page 236/673	TECHNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER-General	We understand that a RTU with all functions of a gas flow computer(The measurement and control tasks are fully independent. The result is a versatile gas flow computer that is well suited to a wide variety of oil and natural gas applications), while retaining the RTU's inherent logic programmability can be offered as field mounted flow computer. Kindly confirm if our understanding is	Flow Computer shall be provided as per TS.  Tender Clause Prevails.

				correct.	
38	DS No: MEC/23VX/01/E5/D2/ DRS&MRS/FC/0501(TECHNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)	Page 236/673	TECHNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER-General	We understand that "a field mounted flow computer" is a flow computer electronics with all its components including its enclosure as single unit are from a single manufacturer/OEM and this field mounted flow computer has a single certification of custody transfer approval and hazardous use application as per per OEM standard. We understand that MECON/BGL has been accepting assembled flow computer (various components from various manufacturers) for custody transfer application for hazardous area application on its various previous projects. Hence, for this RFQ, will MECON/BGL follow the same acceptance methodology ? Please note a response of 'tender condition prevails' will not provide clarity to bidders and will re-affirm your answer that MECON/BGL will accept assembled flow computer as per previous projects.	Make of Flow Computer shall be from the list given in Annexure IV of Tender.
39	DS No: MEC/23VX/01/E5/D2/ DRS&MRS/FC/0501(TECHNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)	Page 236/673	Analog Inputs-pressure measurement should be offered with integral sensor or external PT (accuracy of +0.1% of measured value or better Range ability (Minimum): 1:10)	We understand that a field mounted flow computer with its integral metering pressure sensor having accuracy of $\pm 0.075\%$ will yield higher/accurate custody transfer flow measurement values as compared to a field mounted flow computer with external metering pressure sensor having accuracy of $\pm 0.1\%$ - hence we propose Mecon to confirm use of field mounted flow computer with	Minimum requirement of accuracy has been specified in TS.  Higher accuracy is acceptable meeting the TS requirement.

				its integral metering pressure sensor having accuracy of $\pm 0.075\%$	
40	DS No: MEC/23VX/01/E5/D2/DRS&MRS/FC/0501(TECHNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)	Page 236/673	Analog Inputs-TE shall be integral / external. (Pt-100 3/4 wires, accuracy - $\pm 0.15\%$ of measured value)	We understand that a field mounted flow computer with its inbuilt/onboard RTD input will reduce measuring points and provide better accuracy in temperature measurement which is very crucial for flow calculation/measurement in custody transfer application as compared to a field mounted flow computer which is interfaced with external temperature transmitter. Hence we propose Mecon to confirm use of field mounted flow computer with its inbuilt/onboard RTD input instead of a proper field mounted flow computer with external RTD input using an interface of any sort. Kindly advise how Mecon would like us to quote for a field computer as per above	Tender Clause Prevails

41	<p>DS No: MEC/23VX/01/E5/D2/ DRS&amp;MRS/FC/0501(TEC HNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)</p>	<p>Page 236/673</p>	<p>Hazardous area requirements- Certified intrinsically safe for area classification IEC Class 1 Division 2, Groups C &amp; D.</p>	<p>We understand that BGL's requirement is for custody transfer application. Hence COMPLETE and proven field mounted flow computer shall be certified for custody transfer application and not just an assembled field mounted flow computer whose electronics is AGA &amp; hazardous certified which is combined with some non-hazardous certified enclosure and interfaced with non-hazardous certified display. Kindly confirm if our understanding is correct</p> <hr/> <p>As per Above query, we understand that MECON/BGL does not agree/accept an assembled field mounted flow computer where X make flow computer electronics which is certified for AGA &amp; non-incendive Class-1, Div. 2, Group A, B C, &amp; D requirements combined with + non-hazardous certified enclosure which is of Y make and complying to NEMA4/IP 65 + a non-hazardous certified display which is of Z make and complying to non-incendive and NEMA4 requirement - kindly confirm if our understanding is correct</p>	<p>Flow Computer as a single unit shall meet Hazardous area requirement with ATEX/CMRI &amp; PESO Certificate</p> <p>Make of Flow Computer shall be from the list given in Annexure IV of Tender.</p> <p>Bidder to stick to the intrinsic safety and certification requirements given in the TS.</p>

42	DS No: MEC/23VX/01/E5/D2/ DRS&MRS/FC/0501(TEC HNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)	Page 238/673	Calculations standard-) a)Volume Flow calculations: AGA7 (Latest). b) Compressibility: AGA 8 (Latest) - User selectable Detailed / Gross I / Gross II Methods (Default: Detailed). c) Heating Value: GPA 2172 / ISO 6976 (User selectable; Default: GPA 2172)	We request MECON/BGL to confirm that bidder to offer the flow computer which shall comply AGA-7, AGA- 8(DEATILS, GROSS-1 & 2) method & heating value calculation as per ISO 6976 & GPA 2145 / GPA 2172.	All standards shall be as per TS.
43	DS No: MEC/23VX/01/E5/D2/ DRS&MRS/FC/0501(TEC HNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)	Page 239/673	Enclosure: Weather Proof to IP 55 / NEMA 4 and Compatible for mounting in Hazardous area. Flow computer shall be of modular type and electronic assembly will not be exposed to atmosphere in case of opening /closing of flow computer enclosure door	We understand that electronics of flow computer and enclosure shall be of same make as per OEM standard and full integrated unit of field mounted flow computer shall be certified for hazardous area. Different make of flow computer electronics and different make of its enclosure shall not be acceptable. Kindly confirm if our understanding is correct	Flow Computer as a single unit shall be weatherproof to Min.IP 55/NEMA4 as per TS.  Make of Flow Computer shall be from list given in Annexure IV of Tender.
44	DS No: MEC/23VX/01/E5/D2/ DRS&MRS/FC/0501(TEC HNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)	Page 239/673	Hazardous area requirements- Certified intrinsically safe for area classification IEC Class 1 Division 2, Groups C & D.	We understand that BGL's requirement is for a COMPLETE and proven field mounted flow computer and not a panel mounted flow computer whose electronics is hazardous certified and which is integrated into some enclosure and provided with some display. Kindly confirm if our understanding is correct	Flow Computer as a single unit shall meet Hazardous area requirement with ATEX/CMRI & PESO Certificate  Make of Flow Computer shall be from the list given in Annexure IV of

				<p>We understand that bidder to provide Class 1 Division 2 certificate as a single integrated unit which includes flow computer electronics, its display and flow computer enclosure as per OEM standard.</p> <p>We understand that bidder to provide CCOE/PESO certificate for Class 1 Division 2 certificate(as per IEC/EN 60079-15:2010 standard) as a single integrated field mounted flow computer unit which includes flow computer electronics, its built-in display , built in pressure sensor, built in/onboard RTD input along with flow computer enclosure as per OEM standard. Please confirm.</p>	<p>Tender.</p> <p>Bidder to stick to the intrinsic safety and certification requirements given in the TS.</p>
45	<p>DS No: MEC/23VX/01/E5/D2/ DRS&amp;MRS/FC/0501(TECHNICAL DATA SHEET OF FIELD MOUNTED FLOW COMPUTER)</p>	<p>Page 244/673</p>	<p>SPECIAL INSTRUCTIONS TO VENDOR (FOR FLOW COMPUTERS – FC)- Clause No. 6- The flow computer shall be certified for custody transfer applications by laboratory / institutes authorized by weights and measures authority of its country of origin such as NMI, PTB, Pigsar or other reputed International Standard laboratories such as Trans Canada Calibrations (TCC) Canada, Measurement Canada, Colorado Engineering Experiment Station Inc. (CEESI)</p>	<p>We understand that flow computer model mentioned in custody transfer certificate with each item shall match with the offered model.</p>	<p>Flow Computer as a single unit shall meet Hazardous area requirement with ATEX/CMRI &amp; PESO Certificate</p> <p>Make of Flow Computer shall be from the list given in Annexure IV of Tender.</p> <p>Bidder to stick to the intrinsic safety and certification requirements given in the TS.</p>



46	Doc No: MEC/05/E5/TFM-SIV/- 01 (SIV for turbine flow meter)	Page 245/673	Clause no. 5 & 6 5) The Calibration of Turbine Flow meter shall be with the Flow Straightner / Meter Run. 6) Turbine flow meter shall be calibrated with Air.	Since the calibration of Turbine flow meter is required with air at atmospheric pressure, we understand that it is acceptable to perform calibration of the turbine meter without meter run and straightener. Please confirm if our understanding is correct. Kindly confirm if our understanding is correct	Tender Clause Prevails
47	P&ID for DRS	Page 245/673	Flowrate for TFM: Max.2500 m3/hr & min. 72 m3/hr	With rangeability 1:20 as per TFM datasheet and G-rating G1600 as per P&ID, flow range of turbine meter can be max. 2500 m3/hr and min. 130 m3/hr. Please advise if the same is acceptable	Tender P & ID shall be followed. However, the Minimum and Maximum flow rate as per the standard G Rating of the flow meter given in the P&ID is acceptable.
48	DS No: MEC/23RT/01/05/E5/DS/TFM - 01 (TFM datasheet)	Page 246/673	Point no. 16 Linearity Linearity: +/- 0.5%	We understand that +/- 0.5% linearity required is for 0.2Qmax to Qmax and for Qmin to 0.2Qmax linearity shall be +/-1% as per EN12261 std. Please confirm if our understanding is correct.	Noted
49	Annexure-IV- List of the vendors for bought out items	Page 291/673	Flow computer- •M/s Daniel Measurement and Control Inc. (Vadodara)/ Emerson/Apex •M/s Instromet International (Belgium) •M/s FMC Measurement Solutions (UK) •M/s Emerson Process Management (Singapore) •M/s Bistol Babcock •M/s RMG (Germany) •M/s OMNI Flow Computers Inc.	We understand that offered make of flow computer should be as per approved vendor list only and you will consider other makes of flow computer with relevant PTR. Kindly advise	Shall be as per TS.

			<ul style="list-style-type: none"> <li>•M/s Thermo Fisher, USA</li> <li>•Rockwin</li> <li>•Barton Instrument(UK) •ABB</li> <li>•Dynamic flow computers</li> <li>•Thermofisher</li> </ul>		
50	Part –III, Section-4, P&ID	285 to 288/673	Skid line size	We understand that skid line size mentioned in P&ID for DRS & MRS has to be followed by bidder. Kindly confirm.	All the sizes indicated in the PID are minimum requirements which shall be adhered to. However if higher sizes are required than indicated in the PID , the same will be applicable to meet the design and operating conditions and statutory regulations without any additional cost and time during detailed engineering.
51	Part-III, Annexure-IV, List of Vendors for Bought out items	292 / 673	Make of Cartridge Filter	Kindly accept Rockwin Make Cartridge filter for this project. We have supplied our filters to other CGDs like IGL/MNGL/IOAGPL. We also supplied Rockwin make filters to Bhagyanagar Gas earlier. PTR enclosed.	Tender Prevalis Conditions
52	Part- I, Section 1.1, Clause No. A.1.1.2 (b)	15 / 673	The supplied District regulatory and metering skid to qualify above shall comprise of filtration, Pressure Reduction and Flow Meter with EVC/Flow computer with the complete skid inside	Kindly accept Metering Skid supply PTR without enclosure. Nearly all the Metering skids of such high flow rate/large size are generally supplied to other CGDs without enclosure.	Tender Prevalis Conditions

			cabinet enclosure. The flow meter in the supplied skid can be of Ultrasonic / Turbine / RPD type.		
53	Part- I, Section 1.1, Clause No. A.1.1.2	15 / 673	For qualifying against one & more items indicated in table-1, the bidder shall have designed, fabricated, integrated, tested and supplied for natural gas service at least following number of skids in a single order for each item in previous seven years reckoned from bid due date.	Kindly accept skid supply reference in previous 12 years.	Tender Conditions Prevalails
54	Part- I, Section 1.1, Clause No. A.1.1.2	15 / 673	Technical BEC	We understand that to qualify for item no. A-2.0 DRS 5000 SCMHD Bidder can upload supply reference of skid with Turbine Meter of similar or higher size. Kindly confirm if our understanding is correct.	Bidder who has completed supply of DRS /MRS / Pressure reducing, Filtration & Metering skid (Flow Meter with EVC/Flow Computer) of capacity which is equal or higher than the requirement given in the technical BEC are eligible for qualification. as per clause A.1.1.2 (c), Further, the bidder qualifying for higher Rating/Type of the meter and inlet pipe size rating of the supplied skid will be considered qualified for lower Rating/Type of the meter and inlet pipe size rating also, subject to meeting the cumulative quantity Requirement.

55	General		P&ID for DRS and MRS Skids	We understand that Flowmeter DN size & G-size mentioned in P&ID for DRS & MRS has to be followed by bidder. Kindly confirm.	All the sizes indicated in the PID are minimum requirements which shall be adhered to. However, if higher sizes are required than indicated in the PID , the same will be applicable to meet the design and operating conditions and statutory regulations without any additional cost and time during detailed engineering
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Note: This document shall form an integral part of the bidding document and shall be signed/stamped and submitted along with the bid.

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(STAMP & SIGNATURE OF BIDDER)