

FORWARDING LETTER

TENDER NO. SJI9869P16 Dated 11.01.2016

INVITATION TO e-BID UNDER SINGLE STAGE TWO BID SYSTEM

Dear Sirs,

1.0 Oil India Limited, Rajasthan Project invites Bids for Wireless Remote Well Monitoring System at Dandewala Gas Processing Complex (DND-GPC), Dandewala, Dist. Jaisalmer, Rajasthan through its e-Procurement site. The scope of Work includes Design, Supply, Installation, Testing & Commissioning of Wireless Remote Well Monitoring System.

The general details of tender can be viewed by opening the RFx [Tender] under RFx and Auctions. The details of items tendered can be found in the Item Data and details uploaded under Technical RFX.

The prescribed Bid Forms for submission of bids are available in the Technical RFx - > External Area - > Tender Documents

Pre-Bid Conference: A pre-bid conference to explain Companyøs exact requirements and to reply queries of Bidders, if any, on the tender stipulations will be held on 23.02.2016 at 11:00 hrs (IST) in OILøs Project Office at 2A, District Shopping Centre, Saraswati Nagar, Basni, Jodhpur -342005, Rajasthan. Maximum of two representatives of each bidder will be allowed to attend the pre-bid conference on producing authorization letter. Bidders interested to attend the Pre-Bid Conference should intimate Chief Manager (M&C), Oil India Limited, Jodhpur latest by 20.02.2016.

Note: The bidder's queries, if any should reach us at least 4 working days prior to the date of Pre-bid conference.

The tender will be governed by:

- 1. Technical specifications and Quantity, and any other notes as per Annexure IA.
- 2. Bid Rejection Criteria (BRC) / Bid Evaluation Criteria (BEC) as per Annexure- IB.
- 3. Bidders are advised to take note of Annexure-I_ Price Bid Format, Annexure-II_ Latitude & Longitude, Annexure-III_ Format-A, Annexure-IV_Well Map, Annexure-V_ Format for Spares and Consumables while preparing & submitting their offer.
- 4. General terms and Conditions of the tender are as per attached document No. MM/RP/GLOBAL/E-01/2005.
- 5. The prescribed Bid Forms for submission of bids are available in the tender document folder. Technical Bid Checklist: Annexure-EEE, Response Entry Sheet: Annexure-FFF and Bank Details: Annexure-GGG must be filled-up and submitted along with the technical bid.
- 6. The tender is invited with firm price for the specified quantity. Further details of tender are given in Technical Rfx -> External Area > Tender Documents
- 7. In the event of receipt of only a single offer against the tender within B.C. date, OIL reserves the right to extend the B.C. date as deemed fit by the Company. During the extended period, the bidders who have already submitted the bids on or before the original B.C. date, shall not be permitted to revise their quotation.
- 8. Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited.
- 9. All corrigenda, addenda, amendments, time extension, clarifications etc. To the tender will be hoisted on OILøs website (www.oil-india.com) and in the e-portal (https://etenders.srm.oilindia.in/irj/portal) only and no separate notification shall be issued in the press. Prospective bidders are requested to regularly visit the website and e-portal to keep themselves updated.

10. Type of Bidding: : Single Stage Two Bid system

11. Tender Fee : **INR 1,000.00**

12. Bid security: : INR 1,52,000.00

13. Performance Security: : Applicable (@10% of the PO value)

14. Integrity Pact : Applicable

15. Bid Closing /Opening Date & Time: Please refer to the e- Tender Portal

16. Bid Validity : Bid should be valid for 120 days

from bid closing date.

17. Bid Bond Validity : Bid Bond should be valid up to

15.01.2017.

(Bid bond format has been changed. Please submit bid bond as per revised format. Refer: MM/RP/GLOBAL/E-01/2005)

Special Note:

1.0 General Qualification Criteria:

In addition to the general BRC/BEC, following criteria on Bidders' Experience and their financial capabilities shall be considered (documentary evidence to be provided along with the bid in Technical RFx Response-> User - > Technical Bid) as on the Bid Closing Date:

a) Bidder should have experience of successfully executing similar order for at least INR **45.60** Lakhs during last 3 years.

Definition of Similar Order: Design, Supply, Installation, Testing & Commissioning of Wireless Remote Well Monitoring System as under technical specification of current tender.

b) Annual financial turnover of the firm in any of the last 3 financial years or current financial year should not be less than **INR 152.00 Lakhs.**

2.0 Application showing full address/email address with Tender Fee (Non-refundable) of INR 1,000.00 in the form of a Demand Draft/Banker's Cheque/ Cashier's Cheque in favour of OIL INDIA LIMITED and payable at Jodhpur is to be submitted to Chief Manager (M&C), Oil India Limited, Rajasthan Project, 2A, District Shopping Centre Saraswati Nagar, , Basni, Jodhpur-342005, Rajasthan. Application shall be accepted only upto one week prior to Bid Closing date (or as amended in e-portal). The envelope containing the application for participation should clearly indicate "REQUEST FOR ISSUE OF USER ID AND PASSWORD FOR E TENDER NO. SJ19869P16" for easy

identification and timely issue of user ID and password. On receipt of requisite tender fee, USER_ID and initial PASSWORD will be communicated to the bidder (through email) and will be allowed to participate in the tender through OIL's e- Procurement portal. No physical tender documents will be provided. Details of NIT can be viewed using "Guest Login" provided in the e-Procurement portal. The link to e-Procurement portal has also been provided through OIL's web site www.oil-india.com.

NOTE:

a) Tender Fee may also be paid online upto one week prior to the bid closing date (or as amended in e-portal

NOTE: PSUs and SSI units are provided USER_ID and initial PASSWORD Free of Cost (as per govt guidelines), however they have to apply to OIL's designated office to issue USER_ID and initial PASSWORD before the last date of apply.

- 3.0 Please note that all tender forms and supporting documents are to be submitted through OIL & e-Procurement site only except following document/materials which are to be submitted manually in sealed envelope super scribed with <u>Tender no.</u> and <u>Due date</u> to Chief Manager (M&C), Oil India Limited, Rajasthan Project, 2A, District Shopping Centre, Saraswati Nagar, Basni, Jodhpur-342005, Rajasthan on or before the Bid Closing Date and Time mentioned in the Tender.
 - a) Original Bid Security
 - b) Detailed Catalogue (if any)
 - c) Any other document required to be submitted in original as per tender requirement

All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in duplicate.

- 4.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidders are required to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" through electronic format in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.
- **4.1 Please ensure that Technical Bid** / all technical documents related to the tender are uploaded in the Technical RFx Response-> User > Technical Bid only. The õ**TECHNO-COMMERCIAL UNPRICED BID**Ö shall contain all techno-commercial details **except** the prices. **Please note that no price details should be uploaded in** Technical RFx Response. **Offer not complying with above submission procedure will be rejected.**
- **4.2** In Technical Bid opening, only Technical Rfx will be opened. Therefore, the bidder should ensure that õTECHNO-COMMERCIAL UNPRICED BID should contain details as mentioned in the technical specifications as well as BEC/ BRC and upload the same in the Technical RFx Response-> User > Technical Bid. **No price should be given in above Technical Rfx otherwise the offer will be rejected.** Please go through the help document in details before uploading the document and ensure uploading of technical bid in the Technical RFx Response-> User > Technical Bid only.ö.

- 4.3 The "PRICE BID" must contain the price schedule and the bidder's commercial terms and conditions. The prices of the items should be quoted in "Conditions Tab".
- 5.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.
- 6.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before 15:00 Hrs (IST) on the bid closing date failing which the offer shall be rejected.
- 7.0 Bid must be submitted electronically only through OIL¢s e-procurement portal. Bid submitted in any other form will be rejected.
- **8.0 SINGLE STAGE TWO BID SYSTEM** shall be followed for this tender and only the PRICED-BIDS of the bidders whose offers are commercially and technically acceptable shall be opened for further evaluation.
 - 9.0 a) The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure-XII of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Any bid not accompanied by Integrity Pact Proforma duly signed (digitally) by the bidder shall be rejected straightway. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid.
 - b) The name of the OIL's Independent External Monitors at present are as under:
 - 1. SHRI RAJIV MATHUR, IPS (Retd.), e-Mail ID: rajivmathur23@gmail.com

Their email ids are also furnished in OIL's website, www.oil-india.com

- 10.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-IB**. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per **Annexure-IB**) contradict the Clauses of the tender and / or õGeneral Terms & Conditionsö as per Booklet No. MM/RP/GLOBALL/E-01/2005 elsewhere, those in the BEC / BRC shall prevail.
- 11.0 Materials to be supplied hereunder shall be new, unused, of recent make, of best quality & workmanship and shall be guaranteed by the seller against defects arising from

faulty materials, workmanship or design. Defective goods / materials or parts notified by OIL to the seller shall be replaced immediately by the supplier at the supplier expense at no extra cost to OIL.

12.0 Bidder to quote best delivery period.

13.0 To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

14.0 All the Bids must be Digitally Signed using õClass 3ö digital certificate (*e-commerce application*) with organisation name as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

15.0 The following points are deemed as "non-negotiable" and offer shall be rejected straightaway without seeking clarification in case of the following:

- i. Validity of bid shorter than validity indicated in the tender.
- ii. Original Bid Security not received within the stipulated date and time mentioned in the tender.
- iii. Bid security with (a) Validity shorter than the validity indicated in tender and/or (b) Bid security amount lesser than the amount indicated in the tender.
- iv. In case the party refuses to sign the Integrity Pact.
- 16.0 BIDDERS ARE REQUIRED TO QUOTE WITH MINIMUM VALIDITY OF 120 DAYS FROM THE BID CLOSING DATE AS PER NIT REQUIREMENT.BIDS WITH LESSER VALIDITY SHALL BE REJECTED.
- 17.0 **Performance Security:** Successful bidder will be required to furnish a Performance Security @10% of the order value. For details about performance security submission, please refer Clause No. 10.0 of General Terms and Conditions vide MM/RP/GLOBAL/E-01/2005 for E-Procurement ICB Tenders. The Performance Security must be valid for a period of 12 months from the date of successful commissioning of the system. The bidder should confirm submission of the requisite Performance security (in the event of order) in their offer itself, failing which the offer will be rejected.
- 18.0 You are required to submit original Bid Security at the office of Chief Manager (M&C), Oil India Limited, Rajasthan Project, 02-A, Saraswati Nagar, District Shopping Centre, Basni, Jodhpur-342005, Rajasthan, India on or before the Bid Closing Date and Time of the technical bid. The bid security should be of amount INR 1,52,000.00 in conformity with OILøs prescribed format as Bank Guarantee enclosed with the booklet MM/RP/GLOBAL/E-01/2005 or a Bank Draft/Cashier cheque in favour of OIL INDIA LIMITEDö and payable at Jodhpur, Rajasthan (India).

Bid Security may also be paid online.

- 19.0 For details about Bid Security and the eligibility for exemption of bid security, please refer to Clause 9.0 under Section A of General Terms and conditions for Global Tender vide booklet MM/RP/GLOBAL/E-01/2005. Also please refer Annexure-VII vide MM/RP/GLOBAL/E-01/2005 to obtain the format for Bank Guarantee. A scanned copy of the bid security should be uploaded alongwith the offer for our information. If the bid security in ORIGINAL of above mentioned amount is not received within bid closing date and time, the bid submitted through electronic form will be rejected without any further consideration. The bidders who are exempted from submitting Bid Security should attach documentary evidence alongwith their technical bid. The Bank Guarantee/LC towards Bid Security shall remain valid for 180 days more than the Bid Validity i.e. 300 days validity is required from the date of Bid opening.
- 20.0 Benefits to Micro & Small Enterprises (MSEs) as per prevailing Govt guidelines as applicable on B.C date shall be given. MSEs who are interested in availing the benefits will upload with their offer proof of their being MSE registered for the item tendered. The MSE are also required to upload scanned copies of relevant documents indicating details of registration alongwith validity, name of the registering organization and details of the item, ownership etc,. failing which, their offer may not be liable for consideration of benefits to MSEs.
- 21.0 Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.

NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the terms and conditions of NIT.

Yours Faithfully

Sd-(KRISHNA MOHAN KUMAR) DY. MATERIALS MANAGER FOR CHIEF MANAGER (M&C) FOR EXECUTIVE DIRECTOR (RP)



Oil India Limited (RP) 2-A. District Shopping Centre Saraswati Nagar, Basni Jodhpur-342005, Phone- 0291 -2729-473, 0291 -2729-466

Fax: 0291-2727050 Email: km_kumar@oilindia.in erp_mm@oilindia.in

ANNEXURE-IA

Tender No. & Date : SJI9869P16 Dated 11.01.2016

Bidding Type : Single Stage Two Bid system

Bid Closing on : As mentioned in e-portal Technical Bid Opening on : As mentioned in e-portal

OIL INDIA LIMITED (Rajasthan Project) invites Indigenous Bids for items detailed below:

1.0 TECHNICAL SPECIFICATIONS WITH QUANTITY:

SL. NO. MAT. CODE	MATERIAL DESCRIPTION	QUANTITY	UOM
10 0C000295	DESIGN & SUPPLY OF WIRELESS REMOTE WELL MONITORING SYSTEM at OILS DANDEWALA GAS	1	ОИ
	PROCESSING COMPLEX (DND-GPC), DANDEWALA, DIST. JAISALMER, RAJASTHAN		
20	INSTALLATION & COMMISSIONING OF WIRELESS REMOTE WELL MONITORING SYSTEM at OILS DANDEWALA GAS PROCESSING COMPLEX (DND-GPC), DANDEWALA, DIST. JAISALMER, RAJASTHAN	1	AU

SECTION-I

1.0 Introduction:

Oil India Ltd. intends to monitor its producing gas wells of Jaisalmer, Rajasthan remotely. The goal of this project is to implement state-of-the-art technologies i.e. Wireless Real Time monitoring to get online data like Pressure, Temperature, Flow for all connected gas wells and thereby improving production management. This will further help OIL to have efficient operations, enable taking decisions about well optimization, interventions and work-over operation. The project will have three phases viz. onsite assessment by leading technology vendors, building of the system including Hardware, Software, communication system etc. and final installation & commissioning upto satisfaction of the owner.

- 1.1 The following definition will apply for this document
 - a) Owner: Oil India Limited.
 - b) Bidder/Vendor: who is opting to quote for the system.
 - c) Sub-vendor: Supplier of the system bought by the bidder.

- d) Camp Site: OIL's Tanot Village Complex. Tanot is around 120 kms. from Jaisalmer City.
- e) Plant Site: OILos Dandewala Gas Processing Complex (DND-GPC). DND-GPC is around 35 kms. from Tanot Camp Site.
- 1.2. Environmental Condition:
 - a) Ambient Temperature (Max. /Min.): 55 degC/-6 degC
 - b) Humidity: The maximum humidity recorded in this

region is 40%.

c) Annual Rainfall: 25 mm (Average)

2.0 Scope of Work:

2.1 Design, engineering (Hardware & Software), material selection, manufacturing, supply, nameplate marking, testing, inspection, shipping, erection, testing & commissioning of Wireless Real Time well monitoring to achieve the functionality as specified in this document.

As per requirement, the solution should provide field information from remote gas wells to a central location with help of a technology that is proven for wireless field instrumentation and utilizes self-organizing networks to ensure that measurement information will always be available. These self-organizing wireless networks should automatically optimize connectivity to achieve greater than 99% data reliability. The wireless field devices based on this technology should use small amounts of bandwidth enabling high priority communications. Security and reliability are very important for these solutions as international boundary is nearby to the location. This wireless field instrumentation solution should be engineered & a proven industry standard. The data transmitted through wireless network should be encrypted. The bidder should provide documents in support.

- 2.2 Bid shall include supply of all the parts/ components, may or may not be listed herewith, for smooth operation, maintenance, satisfactory performance of the system for the purpose mentioned in this document and does not limit only to the mentioned topics, but include all that is required for ensuring the delivery of the system totally capable of providing the required functions and quality.
- 2.3 The Scope of work under real time solution, when implemented will need to address the following broad issues:
- a) Continuous measurement of process parameters in the control of production of hydrocarbons. The real time monitoring should include (i) Wellhead pressures (tubing, casing and flow arm) in flowing wells, (ii) Temperature monitoring of the fluid and (iii) Volumetric rate of flow in the flow arm.
- b) The software applications should help to display and store the data. The applications should have the option of taking back-up of the data into the storage media and view the data whenever required. The stored data can be analyzed for well-performance optimization. The software applications should have trending options to monitor the above data in trend and should also have the option of triggering an audible alarm for each individual parameter if the parameter exceeds the value as set by the owner.
- c) The implemented technology should help to monitor the parameters in real time on monitoring stations at DND-GPC (Dandewala Gas Processing Complex), TVC (Tanot Village Complex) & at OIL, Jodhpur. The software is required to be run on a standalone Desktop PC at DND-GPC and existing plant SCADA Desktop PC at TVC & Jodhpur. It may

be noted that TVC plant SCADA system is connected to DND-GPC SCADA system through OFC link and Jodhpur SCADA system is connected through leased line to TVC SCADA network. The existing SCADA system for plant monitoring is FAST TOOLS from M/s Yokogawa.

- 2.4 Bidder shall note that the offered instruments & accessories shall be suitable for the ambient conditions and process operating pressure, temperature, flow & media as mentioned in the tender. The system should run uninterruptedly in any weather conditions.
- 2.5 The wireless technology standard should be globally acceptable and IEC (International Electrotechnical Commission) and IEEE (Institute of Electrical and Electronics Engineers) standard approved. The solution for the sensor network and the backbone link from field to plant network should be based on open industry standard.
- 2.6 Bidder is required to include 16 (Sixteen) nos. of Gas wells for monitoring. The map showing all well locations & latitude-longitude of the wells and DND-GPC are attached for reference.
- 2.7 The system should be designed in such a way that failure of any transmitter and repeater (if any in the field) will not affect the others in monitoring and the system should run uninterruptedly. In simple words, redundant path of communication network is required for all the field devices. The bidder has to submit the proposed network diagram showing redundant path of network along with the technical bid. The successful bidder is required to prove the same during Site Acceptance Test (SAT) after completion of installation & commissioning. The hardware system installed at base station at DND-GPC control room for communicating with the field hardware must be hot redundant and such secondary hardware system of the base station should be able to take load in case the primary gets failed for any reason.
- 2.8 Bidder should visit the work site before bidding to get aware of the locations where the system has to be installed or also to work out the actual requirement of number of repeater/access stations etc for the communication network. Owner will not be responsible for any transportation, accommodation etc. of the bidder personnel for such type of visit. The bidder should take prior permission from the owner before visiting the work site.

Bidder must provide an undertaking along with Technical Bid indicating that they have gone through the scope of work and visited the work site for assessment of the job involved and competent enough to carry out the intended work as per tender requirements.

- 2.9 The project requirements will be as follows:
- A) A wireless remote well monitoring system for maximum of 16 (Sixteen) wells, which are naturally flowing gas wells.
- B) Condition and aggregate the real-time data as required (e.g. daily, weekly, monthly).
- C) Provide production surveillance and monitoring round the clock for all the wells at three different locations of the owner.

2.10 Solution Approach:

The proposed system should provide an optimal, efficient, scalable and maintainable solution to address Oil Indias requirement to effectively manage the production data of the field. The Bidder will establish a real-time operation system with hardware and engineering services necessary to deliver an end-to-end system that captures data from the wells.

Necessary software should be provided to create an efficient link between real-time data and the end users to enable better understanding of well behavior. The software has to display the real-time data according to the needs of the user. The application should also provide alarms and notifications based on predefined conditions, allowing engineers to be informed of disturbing trends early, and facilitate action based on them.

3.0 Components:

The proposed system should include following major components:

I) Base Station Hardware, including server with operator and engineering station (one combined unit), printer, Wireless Gateway Transceiver, SCADA etc.

II) Well Site Hardware system:

Wireless Pressure transmitters, Temperature sensors & transmitters and Flow sensors & transmitters suitable for installation in Class I, Division I, Group D Hazardous areas. All the transmitters shall be approved by DGMS (Directorate General of Mines Safety) for Class I, Division I, Gas Group D Hazardous area applications.

Note:

- 1. These units should be easy to install and able to operate under extreme temperatures.
- 2. The well head hardware should operate using low-power small-size batteries.
- 3. All sensors/transmitters should be extremely resistant to pressure spikes, vibration and moisture intrusion (NEMA 4 and IP 66/67 enclosure). Lightning protection shall be provided for all sensors/transmitters.
- 4. Bidder to note that power supply is not available at well site and there is no mobile network coverage in the operating area.
- III) Repeater Stations (if required as per Biddercs survey and network Design)

Repeater station consisting of radio, antenna, antenna tower, power supply (Solar or any other). The tower for mounting the antenna shall be so designed and constructed that it prevents easy access to unauthorized persons. The civil works necessary, for example, fencing, pillars, gates, etc., will also be the responsibility of the vendor. The radio should operate with licence free frequency. It should operate in the 2.4 GHz Industrial, Scientific, and Medical (ISM) radio band that typically operates from 2.400-2.480 GHz. It is recommended that the wireless transmitters must be capable for long range communication to avoid large number of repeaters.

IV) Application Software (SCADA):

The application software should have following facilities:

- a) Facility to acquire high-frequency data and data conditioning and aggregation features (daily, weekly, monthly).
- b) Workflow of alarms & trends.
- c) Simple interface for Operations and Engineering.
- d) Data Acquisition.
- e) User configured audible alarms.
- f) The Application software should have facility to create different user level for operator & engineering with password facility.
- g) The software should have option of taking back-up of the application and restore the same to an earlier image whenever required.
- h) The software should have minimum 50% scalability with the present license.

Note: The bidder is required to submit sample graphics pages of the Application Software along with the technical bid.

4.0 System Details:

A) Base Station at Dandewala Gas Processing Complex (DND-GPC):

1. Data Transceiver Hardware:

- i) A wireless data transceiver or Gateway that works as a data concentrator unit for wireless field devices. It should act as a data gateway hub for remote monitoring software i.e. interpreter between Field Wireless data to the Display station. Gateway should have multiple output protocols Modbus, TCP, OPC, Ethernet/IP, HART-IP, https (for Web Interface) to ensure integration to a range of host applications. Gateway should have controlled access for a security policy. Gateway should have multiple user accounts with differing access to critical security and configuration parameters such that there can be secure network administration. The Gateway should support multiple connections and, in effect, act like a server/client as per application requirement.
- ii) The Gateway should support the secure transfer of all protocols over an Ethernet connection through a robust encryption process and internal firewall. If the gateway does not support internal firewall, vendor should offer external firewall.
- iii) The bidder should provide hot redundant wireless gateway as it increases the reliability of the system.
- iv) 230 VAC UPS power supply will be provided at DND-GPC control room for base station hardwares. However necessary voltage conversion and laying of cables is in biddercs scope. The connecting load should not be more than 0.5 KVA. If the connecting load is more than 0.5 KVA then the bidder should provide a reputed brand UPS with battery having backup capacity upto atleast 20 minutes for the base station hardware.

Note: The Data Transceiver Hardware must be redundant in all aspects and minimum 50% scalability for future use.

2. Desktop HMI with server for SCADA system-1 no.

- Minimum Specification of HMI

Make & Model: Bidder should mention

Processor: Intel Core i7 Chipset: Original Intel

Memory: Minimum 8-GB (4 X 2GB) DDR3 SDRAM 1600-MHz

Hard Disk: Minimum 1 TB SATA HDD, 7200rpm

Optical Drive: 16X DVD +/-RW

Ethernet: 10/100/1000 Mbps Dual Ethernet Controller

Monitor: OEM 19+TFT Monitor or higher Keyboard: 104 Keys OEM keyboard

Mouse: OEM USB optical scroll mouse with mouse pad

OS: Preloaded Genuine Microsoft Windows 8.1 professional or latest with recovery DVD/CD

Installed Software: Genuine Microsoft Office, Adobe Acrobat Reader.

The bidder should ensure that the system offered has sufficient capacity (Processor, RAM, Hard Drive etc.) for storing & handling similar field data of at least 25 wells for 90 days.

- 3. Laser Printer- 1 no.
- 4. Coax cable, UTP cable, lightning /surge protector, glands etc. (as required)
- 5. Earthing System with earth cable. Owner as earthing pit can be used.
- 6. Erection of Tower, layout/termination of cable from tower to control room, media converter (if required)
- 7. Trenching from tower to control room to lay cable (if required)
- 8. Panel for mounting the base station hardware viz. gateway etc.
- 9. Any other items required to commission the project.
- B) Well Head Monitoring System:
- 1. Wireless Gauge Pressure transmitter with valve manifold-48 nos.
- a) Output Signal: Wireless HART/ ISA100
- b) Measurement Range: 0-200 kg/cm2-32 nos.; 0-100 kg/cm2-16 nos.
- c) Wetted parts material (Suitable for corrosive gases): Process Connection: SS316L

Diaphragm: Hastelloy C

Others: SS316L

- d) Amplifier housing: MFG standard with durable internal/external Intrinsically Safe antenna
- e) Local Display: Digital LED/LCD display

Displays real time data and user-defined Pressure units

Displays diagnostic messages for local troubleshooting

90-degree rotation capability for easy viewing

- f) Power supply: Battery Powered
- g) Cover O-rings: Buna-N or equivalent
- h) Degree of protection: IP66/IP67, NEMA 4
- i) Accuracy: +/- 0.1 % of calibrated span
- j) Stability: +/- 0.1% of URL for 3 years
- k) Hazardous Area Classification: Class I, Division I, Gas Group D
- I) Update rate: User selectable from 10 sec to 60 sec
- m) Battery life: minimum 5 years for 60 sec updation rate.
- n) Process Media: Dry Natural Gas/ Wet Natural Gas (Saline Water+ Gas Condensate)

Note: The natural gas contains around 25-35% CO2

Accessories for each transmitter:

Intrinsically Safe & field replaceable battery module- 1 no.,

2-way valve manifold (SS 316L). The manifold shall be of reputed manufacturer like Parker, Asco, Wika, Swagelok, Hoke, Nuvo Fima or any PSU approved bought out items - 1 no., SS tag plate-1 no.,

Bracket mounting (as required)-1 set

- 2. Wireless Temperature transmitter with RTD and thermo-well 16 nos.
- a) Output Signal: Wireless HART/ ISA100
- b) Measurement Range: 0-100 degC
- c) Input type: 3-wire Pt-100
- d) Amplifier housing: MFG standard with durable internal/external Intrinsically Safe antenna
- e) Local Display: Digital LED/LCD display

Displays real time reading and user-defined Pressure units

Displays diagnostic messages for local troubleshooting 90-degree rotation capability for easy viewing

- f) Electrical connection: Battery powered
- g) Cover O-rings: Buna-N or equivalent
- h) Degree of protection: IP66/IP67, NEMA 4
- i) Accuracy: +/- 1 degC
- j) Hazardous Area Classification: Class I, Division I, Gas Group D
- k) Stability: +/- 0.15% of reading for a year
- I) Update rate: User selectable from 10 sec to 60 sec
- m) Power supply: Battery Powered
- n) Battery life: Minimum 5 years for 60 sec updation rate
- o) Process Media: Dry Natural Gas/ Wet Natural Gas (Saline Water + Gas Condensate)

Note: The natural gas contains around 25-35% CO2

p) Pipe size (OD): 3 ½ inch; schedule 80

Accessories for each transmitter: Intrinsically Safe battery module, SS tag plate, Mounting bracket (as required), RTD (Pt-100), Thermowell (SS 316L), SS Fitting- 1 no.

- 3. Wireless Flow transmitter with Orifice Plate/ Wireless Flow Transmitter with integral Orifice:-16 nos.
- a) Output Signal: Wireless HART/ ISA100
- b) Measurement Range: 0 to 125000 SCMD (Standard Cubic Meters per Day)

Note: The transmitter will be re-ranged as per requirement.

- c) Amplifier housing: MFG standard with durable internal/external Intrinsically Safe antenna
- d) Local Display: Digital LED/LCD display

Displays real time reading and user-defined Pressure units

Displays diagnostic messages for local troubleshooting

90-degree rotation capability for easy viewing

- e) Power supply: Battery Powered
- f) Cover O-rings: Buna-N or equivalent
- g) Degree of protection: IP66/IP67, NEMA 4
- h) Accuracy: +/- 0.1 % of calibrated span
- i) Stability: +/- 0.1% of URL for 3 years
- i) Update rate: User selectable from 10 sec to 60 sec
- k) Hazardous Area Classification: Class I, Division I,
 - Gas Group D
- I) Battery life: Minimum 5 years for 60 sec updation rate
- m) Process Media: Dry Natural Gas/ Wet Natural Gas (Saline Water+ Gas Condensate)

Note: The natural gas contains around 25-35% CO2.

n) Pipe size (OD): 31/2 inch; schedule 80

Accessories for each transmitter:

Intrinsically Safe battery module-1 no.,

SS tag plate-1no.,

Mounting bracket (as required) - 1 set,

5-way valve manifold (SS 316L). The manifold shall be of reputed manufacturer like Parker, Asco, Wika, Swagelok, Hoke, Nuvo Fima or any PSU approved bought out items- 1 no. Orifice Plate assembly: 1 no. 3½ inch Concentric Orifice Plate (Material: SS 316L), 2 nos. 3½ inch 900# RTJ SS flange with metal gasket & bolts as required.

Note:

- A) The Flow indicated should be temperature & pressure compensated at base temperature 15 degC and base pressure 1.03323 kg/cm2a). The compensation shall be either in the transmitter or in the SCADA.
- B) The flow measurement should be as per AGA standard.
- C) The wireless measuring devices should be able to communicate with each other and other wireless devices even without the line of sight.
- D) Wireless Field Devices Battery Specifications:
- a) The Power Modules should be Intrinsically Safe that will allow user to change the power modules in the field.
- b) The wireless field devices should have facility to send low battery level alerts to the host system for easy scheduling of maintenance.
- c) The power module should have Hazardous Locations Approvals FM, CSA, ATEX, IECEx etc.
- d) The battery should be guaranteed for minimum for 5 years on 60 sec updation rate. The bidder (OEM in case of authorised dealer) should replace the battery without any extra cost to OIL on FOR destination basis if the same exhausted before 5 years.
- E) The bidder should supply & commission removable pole for mounting the transmitters wherever required. Mounting of the transmitter to the Well Head or flowing pipeline will not be allowed.
- F) Owner will provide necessary support for installation of the thermowells, orifice plate, pole for mounting the transmitters near the well head.
- G) All the transmitters shall be approved by DGMS (Directorate General of Mines Safety) for Class I, Division I & II, Group D Hazardous area applications.
- 4. Armoured and shielded Cables, Cable glands, RGS conduit and accessories (as required)
- 5. SS Tubing, SS Tubing fittings -Such items shall be from reputed manufacturer like Parker, Asco, Wika, Swagelok, Hoke, Nuvo Fima or any PSU approved bought out items etc.
- 6. SS Isolation valves for all the transmitters (2 nos. for each Flow arm Pressure Transmitter) Impulse Line- Such items shall be from reputed manufacturer like Parker, Asco, Wika, Swagelok, Hoke, Nuvo Fima or any PSU approved bought out items.
- 7. Mounting arrangement, Sun & Rain protection hood for sensors/transmitters (as required)
- 8. If the communication protocol of the wireless transmitters is other than Wireless HART, then the bidder must supply Intrinsically Safe Handheld Field Communicator with accessories or configuration Software with IS rated Hardware for communicating with the wireless transmitters for configuration/calibration -1 no.

Accessories: Battery charger 230 VAC, cables, carrying bag etc.

- 9. Any other items required to commission the project.
- C) Repeater/ Access Stations (if required as per vendors design):

- 1. Solar Battery-Powered Wireless repeater with built-in 2.4 GHz license-free Wireless radio module, packaged in weatherproof housing.
- 2. Omni-directional Antenna, coax cable, lightning /surge protector, radio splitters, etc.
- 3. Support & Mounting Accessories.
- 4. Protective fencing.
- 5. 2.4 GHz free-band microwave radio with antenna, if required.
- 6. Coax cable, lightening /surge protector, etc.
- 7. Solar Power System with at least 5 days battery backup.
- 8. Self-supported communication tower embedded in concrete foundation.
- 9. Any weather-proof, lockable housing required for the equipment.
- 10. Glands, RGS conduit and accessories (as required)
- 11. Earthing wire, pits, etc. (as required).
- 12. Any other items/ jobs required to complete the project.

Note: If the power supply for the Repeater/Access Station will be battery powered only other than Solar Powered, then the battery should cater for minimum 5 years operation with 60 sec update rate of the transmitters. The battery should be guaranteed for minimum for 5 years on 60 sec updation rate. The bidder (OEM in case of authorised dealer) should replace the battery without any extra cost to OIL on FOR destination basis if the same exhausted before 5 years.

D) SCADA System:

- 1. Vendor should provide SCADA system for communication with the wireless gateway cum receiver to record, history, trending, audible alarming, analysis of data of field instruments. This SCADA should display various parameters from field wireless devices PT, TT, DPT etc. in real time trend and history. SCADA should have multiple user accounts (engineering & operator) with different type of access. The following are generic SCADA specifications:
- a. The SCADA should be in simple graphical format. The parameters should be in tabular format.
- b. The Alarms L, LL, H, HH should be user (operator) programmable.
- c. SCADA should support Trends, Graphics/Mimic and should auto generate Reports for 24 Hours data from 6 AM of a day to 6 AM of the next day.
- d. Supplier should provide SCADA with multiple remote access facility (Presently 2 nos. must and should have option to add another 2 nos. in future if required) via dedicated lines (OFC, Leased line etc.). SCADA should support protocol Modbus TCP/IP and OPC via Ethernet standard of communication or Modbus RTU via RS-485 serial communication standard.
- e. SCADA should be of reputed make.
- 2. SCADA Software Package with embedded server in CD/DVD format- 3 sets.
- 3. Any other items/ jobs required to complete the project.

Note:

- 1. The offered SCADA system should have minimum 50% scalability for future use.
- 2. The supplier should provide software that should be able to troubleshoot wireless networks quickly and easily with graphical displays and predictive network diagnostics. The software should be able to estimate the battery life of wireless field devices along with a wireless gateway loading estimator. If the supplied SCADA has the aforesaid options then separate software is not required to supply.

- 5.0 Special Conditions for the bidders:
- 1. The offer shall be evaluated as received. So, bidders are required to quote strictly as per the tender requirement. Bidder shall also submit an unpriced copy of the pricing schedule. This shall include details of all the components/ equipments supplied.
- 2. Offer shall be clear, un-ambiguous (with no alternatives) and complete with all data sheets, catalogues etc.
- 3. Bidder shall note that the supply, erection & commissioning the complete system shall be ordered from one single bidder only.
- 4. Bidder shall furnish a complete list of deviations if any from this tender document. Otherwise it will be assumed that there is no deviation from this tender document and no further deviation will be accepted.
- 5. The bidder has to fill the format %+as mentioned in the tender and submit the same duly signed along with the bid.
- 6. All non-intrinsically safe terminals required for interfacing the system in hazardous area shall be housed in explosion proof boxes. These explosion proof boxes shall be certified by statutory bodies like FM, CMRI etc.
- 7. Bidder may sub-contract a part of the job to any other third party. The actual work to be carried out by the third party should be clearly specified by the bidder during bid submission. Successful bidder has to be always present at site during execution of the assigned part of the job by the third party. Details of the third party personnel to be deployed should be provided to OIL before execution of the job.
- 8. The offered Well Monitoring system shall be such that they are easily expandable by OIL in future.
- 9. Shipment shall be thoroughly checked for completeness before final packing and shipment. The shipment will be considered complete after receiving all the materials along with necessary documents at plant site. Bidder shall be fully responsible for any delay in installation & commissioning as per schedule because of incomplete supply of equipment/components.
- 10. Bidder must visit OIL's site before bidding with prior permission from OIL. However, OIL will not be responsible for providing any transportation, accommodation & fooding to the bidder for such site visit.
- 11. Bidder is required to provide complete transportation of all the materials upto our plant site at Dandewala (DND-GPC), Jaisalmer District.
- 12. The FAT/SAT procedures to be submitted by the bidder for approval by the owner. This document shall include the information related to each test (purpose of the test, definition, procedure for the test, test results, final acceptance).
- 13. Bidder shall note that owner shall provide accommodation, fooding & transportations as per clause 11 (Accomodation, Fooding & Transportation Services). Bidder should not take such charges into account while quoting for installation & commissioning charges.

- 14. The OEM of the Hardware must have operating authorized service centres in India. The address details with phone nos. of all the service centres should be provided during submission of bid.
- 15. The defective materials, if any, rejected by OIL shall be replaced by the bidder at their own expenses and within the shortest possible time. Warranty period will not be counted from the date of rejection till receipt of the replaced materials at site.
- 16. Supplier must follow all safety norms prescribed by OIL while carrying out the job.
- 17. Supplier has to obtain necessary security passes etc. to enter the worksite.
- 18. Successful bidder has to arrange for all necessary tools, measuring equipments for carrying out the job.
- 19. Successful bidder has to take necessary approval from concerned government authority for setting up of radio communication and installation of towers for mounting the repeaters/radios as operating location is located near high security international border. No objection certificate should be obtained before commencement of works.
- 20. The tower should be designed in such a way that person can climb the tower safely to attend any services required for the equipments mounted on top. However, the bidder should install less serviceable items at the top of the tower. The tower & its foundation should have sufficient strength to withstand any weather conditions like heavy storm, heavy rain etc. The foundation should be well protected from rain cut.
- 21. The offered wireless devices i.e. wireless transmitters, repeater/access station & base transceiver hardwares, SCADA should be from same manufacturer. However, if the manufacturer of the Wireless Transmitters does not have the network system & SCADA, then the same may be from third party. The offered network system should have proven track record in the past of working satisfactorily with the manufacturer's wireless transmitters. The bidder has to provide documentary evidence in support of the same. The OEM of the wireless transmitters will be fully responsible for the maintenance support, spare parts support to OIL for the network system & SCADA for a period of 10 years.
- 22. OIL may withhold or nullify the whole or any part of the amount of the contract due to successful bidder on account of subsequently discovered evidence in order to protect OIL from loss on account of:
- i) For non-completion of jobs assigned as per Technical Scope of Work.
- ii) Successful bidder's indebtedness arising out of execution of the contract.
- iii) Defective work not remedied by successful bidder.
- iv) Claims by subcontractor of successful bidder or others filed or on the basis of reasonable evidence indicating probable filing of such claims against successful bidder.
- v) Damage to another Successful bidder of Company.
- vi) All claims against Successful bidder for damages and injuries, and / or for non-payment of bills etc.
- 6. Responsibilities of Successful Bidder:
- 1. Site survey and design of the monitoring network as per final order. The bidder has to submit the final network design within 30 days of placing the order.

- 2. Material selection & manufacturing of the Hardware. Designing of the Software as per requirement & discussion with OIL.
- 3. Factory Acceptance Test (FAT) for the complete package at vendor works.
- 4. Inspection and testing of all major components including SCADA by OIL at vendors works. The vendor has to provide the final design of the SCADA for owners acceptance before the inspection. Vendor shall provide necessary facilities, utilities, labour and consumables required for carrying out the job.
- 5. Installation and commissioning of the well-site hardware, including civil and electrical works, if any.
- 6. Installation and commissioning of the repeater stations, if any, including civil works like protective fencing, tower erection etc.
- 7. Installation and commissioning of the base-station (DND-GPC) hardware and software applications (SCADA), including antenna, tower, necessary civil and electrical works.
- 8. Commissioning of the SCADA software at TVC & OIL, Jodhpur for production surveillance.
- 9. Integration of all installed systems mentioned above and demonstration of the capabilities and performance of the same to owner. Site Acceptance Test (SAT) for the complete package at site upto the satisfaction of the owner.
- 10. Successful Bidder must submit the list of consumables and spares for 10 years as attached FORMAT-B along with price. However, the same will not be considered during price evaluation.
- 11. The successful Bidder must arrange a full-scale demonstration at their site for all the hardware and software offered to show that the items offered meet all the required specifications as mentioned above.
- 12. The successful bidder must arrange minimum 5 (five) days training of the complete installed system to at least two (2) OIL personnel at the biddercs site (OEM's premises in case of authorised dealer). The bidder is also required to provide minimum 2 days training to a group of minimum 10 OIL designated personnel at OIL site after completion of complete installation.
- 13. The bidder has to provide warranty services for one (1) year from the date of successful commissioning as certified by OIL.
- 14. Any work not specifically mentioned but otherwise required, as per statutory rules / codes and standards / specifications for the completion and operation of equipments have to be done by the vendor without any commercial implications.
- 7.0 Pre-Delivery Inspection:

OIL personnel will carry out a pre-delivery inspection of the complete system (for all the hardware and software) to be supplied to OIL under the project of the successful bidder. OIL will bear the cost of travel, boarding and lodging of OIL personnel for attending such

inspection. However, the Bidder will provide all necessary help/ documentation to facilitate the visit and inspection. The Bidder should inform OIL at least 20 days prior to inspection. Vendor shall submit the following test certificates and test reports for purchasers review:

- a. Bill of material check for the complete package as per the final network design.
- b. Manufacturercs test reports for all wetted parts.
- c. Manufacturer Test/calibration reports of all the wireless devices.
- d. Material test certificate for all wetted parts like valves, tube, fittings etc.
- e. Leak test report of the materials.
- 8.0 Shipping:
- 8.1 All threaded openings shall be suitably covered to prevent entry of foreign material.
- 8.2 Each major part shall be sealed in thick plastic bags. Suitable moisture absorbent shall be provided for electronic components. The package shall be suitable for storing in climate as per specified ambient condition.
- 9.0 Personnel to be deployed:
- i) The Bidder will provide competent, qualified and adequately experienced personnel for carrying out jobs. Personnel provided by the Bidder must observe all safety and statutory norms applicable to the Company. Their performance must be to the satisfaction of the Company and the Bidder must be willing and ready to replace, at their own expenses, within a short period of time any of their personnel who are not found suitable by the Company.
- ii) Maintain a highly skilled technical staff to render the services and capable of making the best use of the equipment so as to ensure the highest degree of accuracy and reliability of the works/data gathered.
- iii) Bidder shall, prior to mobilization, furnish to Company a list of all personnel who are to execute the Services. Personnel must have good skill in writing and speaking English. If the Bidder plans to change any personnel from the list, the Bidder shall notify Company in advance of the intended change and give Company the above mentioned particulars of the new person. Company reserves the right to reject any person on such list, and any subsequent changes to the list.
- iv) The bidder should ensure that personnel deployed for execution should be medically fit.
- 10.0 General Statutory requirements:
- i) The successful bidder has to follow the statutory rules and regulations as per OMR and OISD during execution of the project.
- ii) Documentation, record keeping of all safety practices should be conducted as per international/Indian applicable laws, act, regulations etc, as per standard Oilfield practice and these records should be made available for inspection at any point of time. Compliance of these shall be the sole responsibility of the Bidder.

11.0 Accommodation, Fooding and Transportation Services:

- i) Accommodation & Fooding for Biddercs personnel (maximum 2 nos.) shall be provided at OILcs camp at Tanot depending on the availability during site survey after awarding contract (for 1 visit), commissioning period and any emergency visit during the warranty period.
- ii) Transportation of Biddercs personnel from Jaisalmer to OILcs base camp site at Tanot, OILcs base camp site at Tanot to work sites shall be provided by OIL during execution, commissioning and any emergency visit during warranty period.
- iii) OIL will not be responsible for accommodation, fooding and transportation services for third party personnel.

12.0 Date of Commissioning:

Date of commissioning of the complete system will be considered after 30 (thirty) days of un-interrupted successful commissioning of the whole system considering the system is supplied with valid DGMS approval of the field devices. If the system is supplied with DGMS field trial permission, then the system will be considered as successfully commissioned only after obtaining valid DGMS approval for all the field devices of the system for which DGMS approval has been specifically asked for.

13.0 Training:

- (a) The successful Bidder will have to arrange for detailed training of the complete installed system for 2 (two) OIL personnel at the bidders premises for a period of minimum 5 days after commissioning of the complete system.
- (b) OIL will bear the cost of travel, boarding and lodging of OIL personnel.
- (c) The Bidder must mention the details of the training schedule along with the bid.
- (d) Training manuals (hard copies and CD) must be provided to every OIL personnel who attend the training program.
- (e) Bidder must arrange for separate training programme for a group of minimum 10 (ten) OIL designated personnel at OIL site after commissioning for a minimum period of 2 (two) days. This training should include monitoring, data and system backup operations, calibration of the field equipments etc.

14.0 Documentation/ Certificates:

- (a) The successful bidder must submit the network design diagram, wiring diagrams, hookup drawings of the offered system (hard copies and CD), after successful commissioning of the project.
- (b) Vendor shall provide certificate for all the tests indicated in this specifications.
- (c) Technical and user manuals/ literature of all hardware/ software and other equipment must be provided (hard copies and CD).
- (d) All documents and literatures are to be supplied in English Language.
- (e) Four copies of all the documents (except test certificates) mentioned above must be submitted.

15.0 Payment terms:

15.1 The bidder must quote material cost & installation, commissioning charges as separate. Inspection charges (if any) and Training charges if quoted as extra, will be considered as Installation & commissioning charges.

- 15.2 The bid without installation & commissioning charges will be rejected.
- 15.3 The payment will be made as follows in case the bidder is able to supply the materials along with DGMS approval for all the field equipments:
- a) 80% of the material cost (FOR destination) will be paid after receiving the complete materials at site along with DGMS certificate.
- b) 20% of the remaining material cost (FOR destination) + 70% of the total installation & commissioning charges will be paid after 30 (thirty) days of un-interrupted successful commissioning of the whole system.
- c) 30% of the remaining installation & commissioning charges will be paid after successful off-site training at vendors training centre.
- 15.4 The payment for equipment supplied with DGMS field trial permission shall be to the extent of 50% of total cost of the equipment for which DGMS approval is asked for. The balance 50% shall be made on submission of DGMS approval. The system will be considered as successfully commissioned only after obtaining valid DGMS approval for all the required equipments.

16.0 Liquidated Damage/Penalty:

For any delay in completion of the task beyond the date specified in the contract, the owner shall without prejudice to its other remedies under the contract, deduct by way of penalty from the Contract value, a sum equivalent to 0.5% of contract value for every week (7 days) of delay, up to a maximum of 7.5% of the contract value (value of supply, erection and commissioning). Once the maximum is reached, the owner may consider termination of the contract & PBG will be forfeited.

17.0 Performance Bank Guarantee (PBG):

The successful bidder is required to submit Performance Bank Guarantee (PBG) @ 10% of the total order value. The PBG should be valid for 12 months from the date of successful commissioning of the whole system considered as per clause 12.0.

18.0 Operation during Warranty period:

- 18.1 Successful Bidder will have to carry out the following operations of the complete installed system during the warranty period for 1 (one) year from the date of successful commissioning of the complete system. This will include supply and replacement of defective components and also supply and installation of software upgrades, if any, including OS-level upgrades during warranty period. OIL will hold the Bidder responsible for all issues related to the system, including 3rd party products, both hardware and software, and issues related to integration of the same. The bidder will be fully responsible for any modification required in the system to run the system uninterruptedly during the warranty period. The bidder should supply & install any extra item required for such modification without any extra cost to OIL. The bidder should visit owner site within 48 hrs. of reporting any fault leading to system, failing which 0.5% of PBG value per day after 48 hrs. will be forfeited from the bidder upto maximum 7.5% of PBG value.
- 18.2 The successful bidder should be ready to provide any Operation & Maintenance support as asked for by OIL during the warranty period.

- 18.3 Bidder warrants that they shall perform the work in a professional manner and in accordance with the highest degree of quality, efficiency and current state of the art technology/oil field practices and in conformity with all specifications and standards set forth or referred to in the Terms of Reference and with instructions and guidance which Company may, from time to time, furnish to the Bidder.
- 18.4 Should Company discover at any time during the tenure of the Contract or within 30 (thirty) days after completion of operations that the Work does not conform to the Contract requirements, Bidder shall after receipt of notice from Company, promptly perform any and all corrective work required to make the services conform to the contract. Such corrective Work shall be performed entirely at Biddercs own expenses. If such corrective Work is not performed within a reasonable time, the Company, at its option may have such remedial work performed by others and charge the cost thereof to Bidder which the Bidder must pay promptly. In case Bidder fails to perform remedial work, or pay promptly in respect thereof, the performance security shall be forfeited.

SECTION-II

SCHEDULE OF RATES

The bidder shall quote the following rates in their price bid as per the Price Bid Format/Price Schedule Proforma. OIL has the right to increase, decrease or change the wells before placing the order. In that case payment shall be made for the actual quantity of items ordered and the actual work done. But, if the wells remain same as per tender and there is no change in wells then the bidder will be fully responsible for supply and installation of any extra items required to commission the project for running the system uninterruptedly without any extra cost to OIL. Bidder shall offer firm prices. Price quoted by the successful bidder must remain firm during the execution of the contract including 1(one) year warranty period.

1.0 BASE STATION AT DND-GPC:

Base Station includes servers with operator station and engineering station, printers, Data Transceiver Hardware or Gateway, radio, antenna and consumables etc. The details requirement of the Base station is mentioned in Section-I, Clause 4.0 (A).

2.0 WELL-HEAD MONITORING SYSTEM:

The details of the well head monitoring system are mentioned in Section-I, Clause 4.0 (B).

3.0 REPEATER /ACCESS STATION (if any):

Repeater station consisting of radio, antenna, antenna tower, power supply (Solar). The details requirement of the Repeater station is mentioned in Section-I, Clause 4.0 (C).

4.0 SCADA SYSTEM:

The details of the SCADA system are mentioned in Section-I, Clause 4.0 (D).

5.0 INSTALLATION & COMMISSIONING OF THE COMPLETE SYSTEM:

The Bidder shall complete the installation of the complete project within 240 days and subsequently un-interrupted successful running of the whole system for a period of 30 (thirty) days. Bidder shall attend any malfunction occur to the complete system during warranty period as per Section-I, Clause 18.0.

STANDARD NOTES:

- 1.0 Materials to be supplied hereunder shall be new, unused, of recent make, of best quality & workmanship and shall be guaranteed by the seller against defects arising from faulty materials, workmanship or design. Defective goods / materials or parts notified by OIL to the seller shall be replaced immediately by the supplier at the supplier expense at no extra cost to OIL.
- 2.0 Bidders are to quote for total cost for Design, Supply, Installation, Testing & Commissioning of Wireless Remote Well Monitoring System as per tender requirement, Taxes & Duties, Transportation charges upto Oil India Limitedc Gas Processing Plant, DND-GPC at Dandewala near Tanot in Jaisalmer district (155 KMs approx. Distance from Jaisalmer Township) of Rajasthan, Insurance Charges, Entry Tax, Payment Terms, Best Delivery Period, etc. in their offer.
- 3.0 For order with F.O.R. Destination term, 100% payment against dispatch document will not be entertained. In this regards please refer payment terms in ANNEXURE -MM/RP/GLOBAL/E-01/2005. Bidders are advised to take note of this while mentioning payment term.
- 4.0 In the event of receipt of only a single offer against the tender within B.C. date, OIL reserves the right to extend the B.C. date as deemed fit by the Company. During the extended period, the bidders who have submitted the bids on or before the original B.C. date shall not be permitted to revise their quotation.
- 5.0 The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- 6.0 Other terms and conditions of the enquiry shall be as per General Terms and Conditions for Global E-Tender vide MM/RP/GLOBAL/E-01/2005. However, if any of the Clauses of this tender document contradict the Clauses of the booklet MM/RP/GLOBAL/E-01/2005 elsewhere, those in this tender document shall prevail.

BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

The following BRC/BEC will govern the evaluation of the bids received against this tender. Bids that do not comply with stipulated BRC/BEC in full will be treated as non responsive and such bids shall prima-facie be rejected. Bid evaluation will be done only for those bids that pass through the õBid Rejection Criteriaö as stipulated in this document.

Other terms and conditions of the enquiry shall be as per General Terms and Conditions vide MM/RP/GLOBAL/E-01/2005 for E-Procurement (Both ICB & LCB Tenders). However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BRC / BEC) contradict the Clauses of the tender or MM/RP/GLOBAL/E-01/2005 elsewhere, those in the BRC / BEC shall prevail.

<u>Criteria</u>	Complied / Not Complied. (Remarks if any)
1.0 BID REJECTION CRITERIA (BRC):	•
The bid shall conform generally to the terms and conditions given in this document. Notwithstanding the general conformity of the bids to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected.	
A) TECHNICAL:	
The bidder must meet the following criteria failing which offer shall be rejected:	
1.1 The bidder must be in business of providing Real Time Monitoring project in Oil & Gas companies for last 5 (Five) years.	
1.2 The bidder should submit copies of supporting documents duly self certified by bidder in support of their experience mentioned in para 1.1 along with the bid.	
1.3 Bidder can be either OEM of Wireless Transmitters or System Integrator. However, System Integrator must be Authorised agent of offered Wireless Transmitters.	
1.3.1 In case the bidder is OEM as stated above, bidder needs to provide minimum 10 years support letter from self & OEM for other major items (Gateway, Repeater Station, SCADA etc.) as per format given in Clause 1.4.	
1.3.2 In case the bidder is System Integrator as stated above, bidder needs to	

provide:

- a) Authorisation letter(s) from OEM of Wireless Transmitters stating that the bidder is the Authorised agent of their Wireless Transmitters. The authority certificate shall valid upto the completion of tenure of the contract including 1 (one) year warranty period in accordance with the bidding document.
- b) Minimum 10 years support letter from OEM for all the major items (Wireless Transmitters, Gateway, Repeater Station, SCADA etc.) as per format given in Clause 1.4.

Note: The bidder should provide documentary evidences of supplying & successfully commissioning of the same offered system in any other organization. The documentary evidence shall be in the form Purchase Order & Completion Certificate from the end user. The bidder is required to provide the above documentary evidences if the make of Wireless Transmitters, Gateway & Repeater Stations are different.

- 1.3.3 Bidder shall offer wireless transmitters of only one manufacturer. The bid shall be liable for rejection in case of change of the proposed manufacturer after submission of bid.
- 1.4 Bidder shall provide certificate for logistic support for the complete system from the OEM. The bid shall be liable for rejection without this certificate. The format is enclosed as enclosed as Annexure-BB.
- 1.5 Bidder should have experience of successfully executing similar order for at least 30% of estimated value of the Tender during last 3 years as on the Bid Closing Date. Similar implies design, supply, testing and commissioning of True Wireless Real Time Monitoring Project of process parameters (Pressure, Temperature, Flow, Level etc.) Documentary evidence should be submitted from the end user.
- 1.6 PROJECT COMPLETION PERIOD: Offers indicating Project completion period more than 240 (Two hundred forty) days from the date of issue of LOA will be summarily rejected. Bidder should provide a Project Bar Chart along with the bid.
- 1.7 The Bidder must confirm to provide Equipment (software, hardware and other related ancillaries) as specified in SECTION-II, in the bid document. However, equipments which will provide the same functionality as specified in the tender documents will also be accepted.
- 1.8 Bidder must confirm that necessary DGMS approval shall be provided for the process transmitters and other field equipments to be used at well head. The DGMS approval No. shall be affixed or embossed on each piece of equipment. In case DGMS approval is not available during supply, the same shall be supplied with DGMS field trial permission certificate. But the system

will be considered successfully commissioned only after obtaining DGMS approval for all the desired equipments. The bidder has to provide valid documents in this regard. In case the bidder is not OEM then the confirmation should be provided from OEM.

- 1.9 The OEM should have full fledged technical base in India for Hardware and Software service support. The Manufacturer must have operating authorized service centre in India. Document should be attached from the OEM with full address and phone no./e-mail ID etc.
- 2.0 Bidder's offered products must be able to measure all the parameters intended and display the same via SCADA system as mentioned in the tender documents.
- 2.1 Bidder should visit the work site before bidding. Bidder must provide an undertaking on company letter head along with Technical Bid indicating that they have gone through the scope of work and visited the work site for assessment of the job involved and competent enough to carry out the intended work as per tender requirements.
- 2.2 The bidder shall provide details of wireless Real Time Monitoring project executed in previous 5 (five) years. If the bidder is the Authorised Dealer then the same details has to be furnished from OEM.
- 2.3 The bidder shall not have any record of putting on holiday by OIL or blacklisted by any Government Department/ Public Sector till placement of order.

DOCUMENTS:

Bidders must furnish documentary evidences in support of fulfilling all the above requirements as under along with the techno-commercial bid:

- (a) The necessary technical details & literature of all the offered equipments and software are to be submitted online by the bidder along with the technical bid.
- (b) Documents in the form of copies of relevant pages of Purchase Order/payment certificate/completion certificate issued by clients in support of para 1.2 for 1.1).
- (c) Documents as per Clause 1.3.
- (d) Document from OEM mentioning operating authorized service centre in India with full address and phone no.
- (e) Certificate of Logistic Support as per the format given in clause 1.4.

- (f) Documents in the form of copies of relevant pages of Purchase Orders & payment certificates/completion certificates issued by clients in support of para 1.5.
- (g) Confirmation letter regarding para 1.8 above.
- (h) Undertaking on company letter head indicating that the bidder has gone through the scope of work and visited the work site for assessment of the job involved and competent enough to carry out the intended work.
- (i) Documents in support of clause 2.2.
- 3.0 Annual turnover of the firm in any of the last 3 financial years or current financial year should not be less than INR 152.00 Lakhs. (Documentary evidence to be submitted along with Technical Bid)(Audited Accounts/ P&L OR Certificate from CA/Cost Accountant meeting annual turnover).

B) COMMERCIAL:

- i). Bids are invited under õSingle Stage Two Bid Systemö. Bidders have to submit both the õTechno-commercial Unpriced Bidsö and õPriced Bidsö through electronic form in the OIL & e-Tender portal within the bid Closing date and time stipulated in the e-tender. The Techno-commercial Unpriced bid is to be submitted as per scope of works and Technical specification of the tender and the priced bid as per the online Commercial bid format. Any offer not complying with the above shall be rejected straightway.
- ii). In Technical Bid opening, only the õTechnical RFX Responseö tab will be opened. Therefore, the bidder should ensure that Technical Bid is uploaded in the Technical RFX Response->User->Technical Bid only. No price should be given in above õTechnical RFX Responseö tab, otherwise the offer will be rejected. Please go through the help document provided in OILøs e-Portal, in details before uploading the documents.

iii). Bid security:

The bid must be accompanied by Bid Security of INR 1,52,000.00 in OIL's prescribed format as Bank Guarantee or a Bank Draft/Cashier cheque in favour of OIL. The Bid Security shall be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to Chief Manager (M & C), Oil India Limited, Rajasthan Project, 2A District Shopping Centre, Saraswati Nagar, Basni Jodhpur-342005, Rajasthan, India on or before the Bid Closing Date and Time mentioned in the Tender. If bid security in ORIGINAL of above mentioned amount is not received within bid closing date and time, the bid submitted through electronic form will be rejected without any further consideration. The Bank Guarantee towards Bid

Security shall be valid for 300 days from Bid closing date.

In case of extension of Bid Closing date against the tender where a bidder has already submitted his bid with requisite bid security validity within the original B.C. Date, such bidders will extend validity of bid security covering the extended period of the bid closing date.

iv). Performance Security:

The successful Bidder will have to submit Performance Security @ 10% of total Order Value after receipt of order. The Performance Security shall be valid for 12 months from the date of successful commissioning of the system.

Bidder must confirm the same in their bid. Offers not complying with this clause will be rejected.

In case of any delay in commissioning of the system or nonconfirmation to all terms and conditions of order, validity of the Performance Security is to be extended suitably as advised by OIL.

- v). The Bank Guarantee should be allowed to be encashed at all branches within India.
- vi). Validity of the bid shall be minimum 120 days from the Bid Closing Date.
- vii). The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- viii). Bids received in physical form, but not uploaded in OIL¢s e-Tender Portal will be rejected.
- ix). The Bid documents are not transferable. Offers made by bidders who have not been issued the bid document by the Company will be rejected.
- x). Any Bid containing a false statement shall be rejected.
- xi). Bids received by Company after the bid closing date and time will be rejected.
- xii). All the Bids must be Digitally Signed using õClass 3ö digital certificate with Organisationøs name (e-commerce application) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than õClass 3 with Organisationøs Nameö digital certificate, will be rejected.

- xiii). Technical RFx Response folder is meant for Technical bid only. Therefore, No price should be given in Technical RFx Response folder, otherwise the offer will be rejected.
- xiv). Price should be maintained in the õonline price scheduleö only. The price submitted other than the õonline price scheduleö shall not be considered.
- xv). Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of 1(one) year from the date of successful commissioning against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplierge expenses and no extra cost to OIL.

xvi). Integrity Pact:

OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure XII of the tender document. This Integrity Pact proforma has been duly signed digitally by OILøs competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Any bid not accompanied by Integrity Pact Proforma duly signed (digitally) by the bidder shall be rejected straightway. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidderøs authorized signatory who sign the Bid.

2.0 BID EVALUATION CRITERIA (BEC)

- 1.0 The bids conforming to the terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria as well as verification of original of any or all documents/ documentary evidences pertaining to BRC will be considered for further evaluation as per the Bid Evaluation Criteria.
- 2.0 Priced bids of only those bidders will be opened whose offers are found technically acceptable. The technically acceptable bidders will be informed before opening of the "priced bid".
- 3.0 The bidder must quote for all the services mentioned in the tender. Partial offer will be rejected straightway.
- 4.0 The bidder must quote their charges/ rates in the manner as called for vide enclosed Price Bid Format Annexure-I.
- 5.0 The bid will be evaluated taking into account the rates quoted in the price bid format as per enclosed Price Bid Format Annexure-I.

- 6.0 The quantities mentioned against each item in Schedule of Rate/Price Bid Format are for evaluation purpose only. However, payment will be made at actual.
- 7.0 For evaluation of bids, total cost of Wireless Remote Well Monitoring System, Installation & Commissioning Charges, as per tender requirements, are to be considered.
- 8.0 Comparison of offers will be done on Total F.O.R Oil India Limited

 Gas Processing Plant, (DND-GPC) at Dandewala near Tanot in Jaisalmer district (155 KMs approx. Distance from Jaisalmer Township) of Rajasthan basis as under:
- (A) Total Material Cost (Supply Portion of Price Bid Format Annexure-I)
- (B) Packing and Forwarding Charges, if any
- (C) Total Ex-works value, (A + B) above
- (D) Excise Duty as applicable on (C) above
- (E) Sales Tax as applicable on (C+D) above
- (F) Total FOR Manufacturing station Value, (C +D +E) above
- (G) Transportation charges to destination (OILøs DND-GPC)
- (H) Insurance charges @ 0.5% of total FOR Mfg. Station Value (F) above
- (I) Rajasthan Entry Tax
- (J) Total FOR Destination (OIL\(\psi \) DND-GPC) value (F + G + H+I) above
- (K) Installation/Commissioning, Training Charges including service tax (Service Portion of Price Bid Format Annexure-I)
- (L) Grand Total value (J + K)
- 5.0 To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

3. GENERAL:

The Compliance statement must be filled up by bidders and to be submitted/uploaded along with their bids. In case bidder takes exception to any clause of the bidding document not covered under BEC/BRC, then the Company has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw/modify the deviation when/as advised by Company. The loading so done by the company will be final and binding on the bidders.

If any of the clauses in the BRC contradicts with other clauses of bidding document elsewhere, then the clauses in the BRC shall prevail.

NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

----XXXX

CERTIFICATE FOR LOGISTIC SUPPORT

(To be signed by authorized signatory of the man	ufacturer on company's Letterhead)
1. On behalf of M/s	I do hereby confirm that the /SCADA/any other major items quoted by
M/s	
for Oil India Limited against Tender Nosupported by us.	shall continue to be
2. Further confirm that in case of placement of support if required during commissioning (for maintenance support and spare parts support to O 10 years from the date of placement of order.	Authorised Supplier), backup engineering,
3. In case of placement of order, we shall replace against the order on FOR destination basis wi exhausted before 5 years.	•
(SIGNATURE WITH COMPANY SEAL)	