Notice Inviting e-Bid

Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based SCADA / IoT system in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

> Two Part Online Bid (Single Stage) Part I

TECHNICAL BID

(To be submitted duly Filled and Signed Along With the Bid)

NIB. NO:- RSGSM/IT/SCADA/23-24/8

Dated 26/05/2023

Pre-Bid Meeting	:	On 02/06/2023 At 11.00 AM
Bid Submission Start Date	:	From 12/06/2023 At 03.00 PM
Last Date/ Time Of Download Of Bid Form	:	Till 26/06/2023 Up To 6.00 PM
Last Date/ Time Of Upload Of The Bid	:	Till 26/06/2023 Up To 6.00 PM
Date And Time Of Opening Of The Bid	:	On 27/06/2023 At 12.30 PM
Date And Time Of Opening Of The Financial Bid	:	To Be Intimated Through Eproc Automated Messaging System
Price Of Bid Document	:	Rs. 5000+GST
Price Of E- Bidding Process Fee	:	Rs. 2500/-

Section-I: Instruction to Bidders (Rajasthan State Ganganagar Sugar Mills Limited)

Rajasthan State Ganganagar Sugar Mills Limited

3rd Floor, Centre of Excellence for Revenue Research & Analysis,
Jhalana dungari, Jaipur, Rajasthan
Website:- excise.rajasthan.gov.in
Email Id:-itcell.rsgsm@rajasthan.gov.in

RSGSM/IT/SCADA/23-24/8

Dated 26.05.2023

NOTICE INVITING BIDS

Bids for Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based SCADA / IoT system in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data are invited from interested bidders up to 6.00 p.m. on 26.06.2023. Other particulars of the bid may be visited on the procurement portal (http://eproc.rajasthan.gov.in and http://sppp.rajasthan.gov.in) of the state and departmental website http://excise.rajasthan.gov.in/.

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SECTION-1: INSTRUCTION TO BIDDERS

Important Instruction: - Transparency in Public Procurement Act, 2012" [hereinafter called the Act] and the "Rajasthan Public Procurement Rules, 2013" [hereinafter called the Rules] under the said Act have come into force which are available on the website of State Public Procurement Portal http://sppp.raj.nic.in. Therefore, the Bidders are advised to acquaint themselves with the provisions of the latest updated Act and the Rules before participating in the Bidding process. If there is any discrepancy between the provisions of the Act and the Rules and this Bidding Document, the provisions of the Law shall prevail.

1. G	eneral		
1.1	Scope of Bid	1.1.1	In support of the Invitation to Bid indicated in the Bid Data Sheet (BDS), the Procuring Entity as indicated in the BDS, issues this Bidding Document for the procurement of works as named in the BDS and as specified in Section V, Procuring Entity's Requirements.
1.2	Interpretation	1.2.1	Throughout this Bidding Document: The term "in writing" means communicated in written form through letter, e-mail etc. with proof of receipt. if the context so requires, singular means plural and viceversa; and "Day" means calendar day
1.3	Code of Integrity	1.3.1	Any person participating in the procurement process shall,- i. not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
			ii. not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
			iii. not indulge in any collusion, bid rigging or anti- competitive behavior to impair the transparency, fairness and progress of the procurement process;
			 iv. not misuse any information shared between the Procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
			v. not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
			vi. not obstruct any investigation or audit of a procurement process;
			vii. disclose conflict of interest, if any; and
			Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other Procuring Entity.

Section-I: Instruction to Bidders
(Raiasthan State Ganganagar Sugar Mills Limited)

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	1.3.2	Conflict of Interest: A conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations. A Bidder may be considered to be in conflict of interest with one or more parties in this bidding process if, including but not limited to: i. have controlling partners/ share holders in common; or
		ii. receive or have received any direct or in direct subsidy from any of them; or
		iii. have the same legal representative for purposes of this Bid; or
		iv. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding this bidding process; or
		v. the Bidder participates in more than one Bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subbidder, not otherwise participating as a Bidder, in more thanone Bid; or
		vi. the Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Works that are the subject of the Bid; or
		vii. the Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as consultant for the Contract.
	1.3.3	The Bidder shall have to give a declaration regarding compliance of the Code of Integrity prescribed in the Act, the Rules and stated above in this Clause along with its Bid, in the format specified in Section IV, Bidding Forms.
	1.3.4	Breach of Code of Integrity by the Bidder: - Without prejudice to the provisions of Chapter IV of the Rajasthan Transparency in Public Procurement Act, in case of any breach of the Code of Integrity by a Bidder or prospective Bidder, as the case may be, the Procuring Entity may take appropriate action in accordance with the provisions of sub-section (3) of section 11 and section 46 of the Act.

1.4	Eligible Bidders	1.4.1	Bidder shall be legal entity under the Indian govt. Law having complete solution provider, which fulfills the	
			Technical Qualification Criteria by their own credentials.	
			JV or consortium is not allowed for this project.	
		1.4.2	Bidder shall have nationality of Indian.	
		1.4.3	A Bidder should not have a conflict of interest in the procurement in question as stated in the Rule 81 and this Bidding document.	
		1.4.4	A Bidder debarred under section 46 of the Act shall not be eligible to participate in any procurement process undertaken by any Procuring Entity, if debarred by the State Government; and a Procuring Entity, if debarred by such Procuring Entity.	
		1.4.5	 i Any change in the constitution of the firm, etc., shall be notified forth with by the Bidder in writing to the Procuring Entity and such change shall not relieve any former partner/ member of the firm, etc from any liability under the Contract. ii No new partner/partners shall be accepted in the firm by the Bidder in respect of the contract unless he/they agree to abide by all its terms, conditions and deposit with the Procuring Entity a written agreement to this effect. The Bidder's receipt for acknowledgement or that of any partners subsequently accepted as above shall bind all of them and will be sufficient discharge for any of the purpose of the Contract. 	
		1.4.6	Bidders shall provide such evidence of their continued eligibility satisfactory to the Procuring Entity, should the Procuring Entity request.	
		1.4.7	In case a prequalification or empanelment or registration process has been conducted prior to the bidding process, this bidding shall be open only to the prequalified, empanelled or registered Bidders.	
		1.4.8	Each Bidder shall submit only one Bid.	
		1.4.10	Bidder who is not registered under the Sales Tax Act prevalent in the State of Rajasthan can bid, however selected bidder shall have to be got registered with the Sales Tax department of the state government and submit the proof of registration before signing the Contract agreement. He is also required to provide proof of Permanent Account Number (PAN) given by Income Tax Department.	
2. C	2. Contents of Bidding Document			

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2.1	Sections of the Bidding Document	2.1.1	The Bidding Document consists of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB Clause 2.3 [Amendment of Bidding Document]. Part I: Bidding Procedures Section I. Instructions to Bidders (ITB) Section II. Bid Data Sheet (BDS) Section III. Evaluation and Qualification Criteria Section IV. Bidding Forms Part II: Requirements Section V. Procuring Entity's Requirements. Part III: Contract Section VI A. General Conditions of Contract [GCC] Section VI B. Special Conditions of Contract [SCC] Section VI C. Contract Forms
		2.1.2	The Invitation for Bids (NIB) issued by the Procuring Entity is also part of the Bidding Document.
		2.1.3	The Bidding Document shall be uploaded on the e-procurement portal, eproc.raj.nic.in along with the Notice Inviting Bids. The complete Bidding Document shall also be downloaded from State Public Procurement Portal, sppp.raj.nic.in & excise.rajasthan.gov.in. The prospective Bidders may download the bidding document from these portals. The price of the Bidding Document and processing fee of e-bid shall have to be paid to the Procuring Entity in the amount and manner as specified in Bid Data Sheet and e-procurement portal.
		2.1.4	The Procuring Entity is not responsible for the completeness of the Bidding Document and its addenda, if they were not downloaded correctly from the e-procurement portal or the State Public Procurement Portal.
		2.1.5	The Bidder is expected to read & examine all instructions, forms, terms and specifications in the Bidding Document. Failure to furnish all information or authentic documentation required by the Bidding Document may result in the rejection of the Bid.
2.2	Clarification of Bidding Document and Pre-Bid Conference	2.2.1	The Bidder shall be deemed to have carefully read & examined the conditions, specifications, size, make and drawings, etc. of the Works and Related Services to be provided. If any Bidder has any doubts as to the meaning of any portion of the conditions or of the specifications, drawings etc., it shall, before submitting the Bid, refer the same to the Procuring Entity and get clarifications. A Bidder requiring any clarification of the Bidding Document shall contact the Procuring Entity in writing or email at the Procuring Entity's address indicated in the BDS. The clarification issued, including a description of the inquiry but without identifying its source shall also be placed on the State Public Procurement Portal and should the Procuring Entity deem it necessary to amend the Bidding Document as a result of a clarification, it shall do so following the procedure under ITB Clause 2.3 [Amendment of Bidding Document] through an addendum which shall form part of the Bidding Document

Section-I: Instruction to Bidders
(Raiasthan State Gangangar Sugar Mills Limited)

(Rajas	than State Gangana	ıgar Sugar M	ills Limited)
		2.2.2	The Bidder or his authorized representative is invited to attend the Pre- Bid Conference, if provided for in the BDS. The purpose of the Pre- Bid Conference will be to clarify issues and to answer questions on any matter related to this procurement that may be raised at that stage.
		2.2.3	The Bidder is requested, to submit queries/suggestion by e-mail on itcell.rsgsm@rajasthan.gov.in, to reach the Procuring Entity on or before pre-bid meeting.
		2.2.4	Pre-Bid Conference responses shall also be placed on the State Public Procurement Portal and the e- procurement portal. Any modification to the Bidding Document shall be part of Bid document.
		2.2.5	At any time prior to the deadline for submission of the Bids, the Procuring Entity, suomotto, may also amend the Bidding Document, if required, by issuing an addenda which will form part of the Bidding Document.
		2.2.6	Non-attendance at the Pre-Bid Conference will not be a cause for disqualification of a Bidder.
2.3	Amendment of Bidding Document	2.3.1	Any addendum issued shall be part of the Bidding Document and shall be uploaded on the State Public Procurement Portal and the e-procurement portal.
		2.3.2	To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Entity may, at its discretion, extend the deadline for the submission of the Bids, pursuant to ITB Sub-Clause 4.2 [Deadline for Submission of Bids], under due publication on the State Public Procurement Portal and the e-procurement portal.
3. P	reparation of Bio	ds	
3.1	Cost of Bidding	3.1.1	The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Procuring Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
		3.1.2	The Bidder shall furnish the scanned attested copies of following documents with its Bid: i. Partnership Deed and valid registration certificate with the Registrar of Firms in case of Partnership Firms. Power of Attorney in favor of the partner signing/submitting the Bid, authorizing him to represent all partners of the firm. ii. VAT/ Sales Tax registration certificate and VAT/Sales Tax clearance certificate from the concerned Commercial Taxes Officer and Permanent Account Number (PAN) given by the Income Tax Department. iii. Address of residence and office, telephone numbers email address in case of sole Proprietorship. iv. Certificate of Registration and Memorandum of Association issued by Registrar of Companies in case of a registered company and in case of any other statutory or registered body, certificate of incorporation or registration issued by concerned authorities. Power of attorney in favor of the person signing the Bid.

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3.2	Language of Bid	3.2.1	The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Procuring Entity, shall be written in English/ Hindi or a language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages duly accepted by the Bidder in English/ Hindi or the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.
3.3	Documents Comprising the Bid	3.3.1	The Bid comprise technical and financial document shall upload on e-proc portal online.
		3.3.2	 The Technical Bid/ Proposal shall contain the following: i. Technical Bid/ Proposal Submission Sheet and Technical Bid containing the filled up Bidding Forms and Declarations related to Technical Bid and Code of Integrity given in Section IV [Bidding Forms]; ii. proof of payment of price of Bidding Document, processing fee, Bid Security, in accordance with ITB Clause 3.10; iii. written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 3.11; iv. documentary evidence in accordance with ITB Clause 3.7 establishing the Bidder's eligibility to bid; v. documentary evidence in accordance with ITB Clause 3.8 establishing the Bidder's qualifications to perform the contract if its Bid is accepted; vi. Drawings/ designs in support of the Works to be executed; vii. the Notice Inviting Bids; viii. any other document required in the BDS; and ix. Others considered necessary to strengthen the Bid submitted.
		3.3.3	The Financial Bid shall contain the Price Proposal.
3.4	Bid Submission andPrice Schedules	3.4.1	The Bidder shall submit online Technical Bid and Financial Bid. Bid shall be complete in all respect. All blank spaces shall be filled in with the information requested.
		3.4.2	The Bidder shall submit as part of the Financial Bid, the Price Schedules for Works, using the forms provided in Section IV [Bidding Forms].
3.5	Bid Prices	3.5.1	Bidder shall quote the rates on TURNKEY basis. Bidder shall quote the total price which the bidder wants to charge for the entire work mentioned in scope of work.

		3.5.2	Prices quoted by the Bidder shall be fixed during the Bidder's Performance of the Contract and not subject to variation on any account,
		3.5.3	All duties, taxes and other levies payable by the Bidder under the contract, or for any other cause, shall be included in the rates and prices, and the total Bid Price submitted by the Bidder.
3.6	Currencies of Bid.	3.6.1	The unit rates and the prices shall be quoted by the Bidder entirely in Indian Rupees unless otherwise specified in BDS. All payments shall be made in Indian Rupees only, unless otherwise specified in the BDS.
3.7	Documents Establishing the Eligibility of the Bidder	3.7.1	To establish their eligibility in accordance with ITB Clause 1.4 [Eligible Bidders].
	Documents Establishing the Qualifications of the Bidder	3.8.1	To establish its qualifications to perform the Contract, the Bidder shall submit as part of its Technical Proposal the documentary evidence indicated for each qualification criteria specified in Section III, [Evaluation and Qualification Criteria].
3.9	Period of Validity of Bids	3.9.1	Bids shall remain valid for 180 days or the period specified in the BDS after the Bid submission deadline date as specified by the Procuring Entity. A Bid valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.
		3.9.2	In exceptional circumstances, prior to the expiration of the Bid validity period, the Procuring Entity may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. The Bid Security in accordance with ITB Clause 3.10 [Bid Security] shall also be got extended for thirty days beyond the dead line of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be permitted to modify its Bid.
3.10	Bid Security	3.10.1	Unless otherwise specified in the BDS, the Bidder shall furnish as part of its Bid, a Bid Security for the amount specified in the BDS.
		3.10.2	Bid Security shall be 2% of the value of the Works indicated in the NIB. The bid security shall be in Indian Rupees, if not otherwise specified in the BDS.
		3.10.3	The Bid Security may be given in the form of demand draft a Scheduled Bank in India in specified format or deposited through NEFT/RTGS.
		3.10.4	Scanned copy of Bid Security shall necessarily shall upload along with the technical Bid. Any Bid not accompanied by Bid Security shall be liableto be rejected.
		3.10.5	Bid Security of a Bidder lying with the Procuring Entity in respect of other Bids awaiting decision shall not be adjusted towards Bid Security for the this Bid. The Bid Security originally deposited may, however be taken into consideration in case Bids are re-invited.

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	3.10.6	The issuer of the Bid Security and the confirmer, if any, of the Bid Security, as well as the form and terms of the Bid Security, must be acceptable to the Procuring Entity.
	3.10.7	Prior to submitting its Bid, a Bidder may request the Procuring Entity to confirm the acceptability of a proposed issuer of a Bid Security or of a proposed confirmer, if different than as specified in ITB Clause 3.10.3. The Procuring Entity shall respond promptly to such a request.
	3.10.9	The Bid Security of unsuccessful Bidders shall be refunded soon after final acceptance of successful Bid and signing of Contract Agreement and submitting Performance Security by successful Bidder pursuant to ITB Clause 6.4 [Performance Security].
	3.10.10	The Bid Security taken from a Bidder shall be forfeited in the following cases, namely:- i. when the Bidder withdraws or modifies his Bid after opening of Bids; or
		ii. when the Bidder does not execute the agreement in accordance with ITB Clause 6.3 [Signing of Contract] after issue of letter of acceptance/ placement of Work order within the specified time period; or
		iii. when the Bidder fails to commence the Works as per Work Order within the time specified; or
		iv. when the Bidder does not deposit the Performance Security in accordance with ITB Clause 6.4 [Performance Security]; in the prescribed time limit after the work order is placed;
		v. if the Bidder breaches any provision of the Code of Integrity prescribed for Bidders in the Act and Chapter VI of the Rules or as specified in ITB Clause 1.3 [Code of Integrity]; or
		vi. if the Bidder does not accept the correction of its Bid Price pursuant to ITB Sub-Clause 5.5 [Correction of Arithmetical Errors].
	3.10.11	In case of the successful bidder, the amount of Bid Security may be adjusted in arriving at the amount of the Performance Security, or refunded if the successful bidder furnishes the full amount of Performance Security. No interest will be paid by the Procuring Entity on the amount of Bid Security.

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		3.10.12	The Procuring Entity shall promptly refund the Bid Security of the Bidders at the earliest of any of the following events, namely:- i. the expiry of validity of Bid Security;
			ii. the execution of agreement for procurement and Performance Security is furnished by the successful bidder;
			iii. the cancellation of the procurement process; or
			iv. The withdrawal of Bid prior to the deadline for presenting Bids, unless the Bidding Document stipulates that no such withdrawal is permitted.
3.11	Format and Signing of Bid	3.11.1	All pages of the Technical and Financial Bid shall be digitally signed by the Bidder or authorized signatory on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid.
4. S	ubmission and C	Opening of	Bids
4.1	Sealing and Marking of Bids	4.1.1	Bidders shall submit their Bids to the Procuring Entity electronically only on the e-procurement portal, eproc.raj.nic.in. In submission of their Bids, the Bidders should follow the step by step instructions given on the e-procurement portal.
		4.1.2	The Bidder shall upload the Technical Bid and the Financial Bid on e-proc portal. The proof of payment of price of Bidding Document, processing fee and Bid Security shall be upload. The price of Bidding Document and Bid Security shall be paid in the name of the Procuring Entity and the processing fee shall be paid in the name of RISL.
	Deadline for Submission of Bids	4.2.1	Bids shall be submitted electronically only up to the time and date specified in the Notice Inviting Bids and BDS or an extension issued thereof.
4.3	Withdrawal, Substitution and Modification of Bids	4.3.1	A Bidder may withdraw, substitute or modify its Bid after it has been submitted by submitting electronically on the e-procurement portal a written Withdrawal/ Substitutions/ Modifications etc. Notice on the e-procurement portal, duly digitally signed by the Bidder or his authorized representative, and shall include a copy of the authorization in accordance with ITB Sub-Clause 3.11.1 [Format and Signing of Bid]. The corresponding Withdrawal, Substitution or Modification of the Bid must accompany the respective written Notice. All Notices must be received by the Procuring Entity on the e-procurement portal prior to the deadline specified for submission of Bids in accordance with ITB Sub-Clause 4.2. [Deadline for Submission of Bids].
		4.3.2	No Bid shall be withdrawn, substituted or modified in the interval between the deadline for submission of the Bid and the expiration of the period of Bid validity specified in ITB Clause 3.9.[Period of Validity of Bids] or any extension thereof.
4.4	Bid Opening	4.4.1	The electronic Technical Bids shall be opened by the Bids opening committee constituted by the Procuring Entity at the time, date and place specified in the Bid Data Sheet in the presence of the Bidders or their authorized representatives, who choose to be present.

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	4.4.2	The Bids opening committee may co-opt experienced persons in the committee to conduct the process of Bid opening.
	4.4.3	The Bidders may choose to witness the electronic Bid opening procedure online.
	4.4.4	The Financial Bids shall be kept unopened until the time of opening of the Financial Bids. The date, time, and location of electronic opening of the Financial Bids shall be intimated to the bidders who are found qualified by the Procuring Entity in evaluation of their Technical Bids.
	4.4.5	The Bids opening committee shall prepare a list of the Bidders or their representatives attending the opening of Bids and obtain their signatures on the same. The list shall also contain the representative's name and telephone number and corresponding Bidders' names and addresses. The authority letters brought by the representatives shall be attached to the list. The list shall be signed by all the members of Bids opening committee with date and time of opening of the Bids.
	4.4.7	Technical Bids shall be opened one at a time and the following read out and recorded- i. the name of the Bidder.
		whether proof of payment of Bid Security, if required, payment of price of the Bidding Document and processing fee have been enclosed.
		After all the Bids have been opened, their hard copies shall be printed and shall be initialed and dated on the first page and other important papers of each Bid by the members of the Bids opening committee.
	4.4.8	Only Technical Bids shall be read out and recorded at the bid opening and shall be considered for evaluation. No Bid shall be rejected at the time of opening of Technical Bids except Alternative Bids (if not permitted) and Bids not accompanied with the proof of payment of the required price of Bidding Document, processing fee and Bid Security.
	4.4.10	After completion of the evaluation of the Technical Bids, the Procuring Entity shall invite Bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified to attend the electronic opening of the Financial Bids. The date, time, and location of the opening of Financial Bids will be intimated through e-proc msg system by the Procuring Entity.
	4.4.11	The Procuring Entity shall notify Bidders in writing whose Technical Bids have been rejected on the grounds of being substantially non-responsive and not qualified in accordance with the requirements of the Bidding Document.
	4.4.12	The Bids opening committee shall conduct the electronic opening of Financial Bids of all Bidders who submitted substantially responsive Technical Bids and have qualified in evaluation of Technical Bids, in the presence of Bidders or their representatives who choose to be present at the address, date and time specified by the Procuring Entity.

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		4.4.13	All covers containing the Financial Bids shall be opened one at a time and the following read out and recorded- i. the name of the Bidder;	
			ii. the Bid Prices	
			After all the Bids have been opened, their hard copies shall be printed and shall be initialed and dated on the first page of the each Bid by the members of the Bids opening committee. All the pages of the Price Schedule and letters, Bill of Quantities attached shall be initialed and dated by the members of the committee. Key information such as prices, completion period, etc. shall be encircled and unfilled spaces in the Bids shall be marked and signed with date by the members of the Bids opening committee.	
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	valuation and C Confidentiality	omparison 5.1.1	Information relating to the examination, evaluation,	
3.1	Comidentiality	3.1.1	comparison, and post-qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.	
		5.1.2	Any attempt by a Bidder to influence the Procuring Entity in its examination of qualification, evaluation, comparison of the Bids or Contract award decisions may resulting in the rejection of its Bid, in addition to the legal action which may be taken by the Procuring Entity under the Act and the Rules.	
		5.1.3	Notwithstanding ITB Sub-Clause 5.1.2 [Confidentiality], from the time of opening the Bid to the time of Contract award, if any Bidder wishes to contact the Procuring Entity on any matter related to the Bidding process, it shall do so in writing.	
		5.1.4	In addition to the restrictions specified in section 49 of the Act, the Procuring Entity, while procuring a subject matter of such nature which requires the procuring Entity to maintain confidentiality, may impose condition for protecting confidentiality of such information.	
5.2	Clarification of Technical or Financial Bids	5.2.1	To assist in the examination, evaluation, comparison and qualification of the Technical or Financial Bids, the Bid evaluation committee may, at its discretion, ask any Bidder for a clarification regarding his Bid. The committee's request for clarification and the response of the Bidder shall be in writing.	
		5.2.2	Any clarification submitted by a Bidder with regard to his Bid that is not in response to a request by the Bid evaluation committee shall not be considered.	
		5.2.3	No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetical errors discovered by the Bid evaluation committee in the evaluation of the financial Bids.	

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		5.2.4	No substantive change to qualification information or to a submission, including changes aimed at making an unqualified Bidder, qualified or an unresponsive submission, responsive shall be sought, offered or permitted.	
5.3	Deviations, Reservations and Omissions in Technical or Financial Bids	5.3.1	During the evaluation of Technical or Financial Bids, the following definitions apply: i. "Deviation" is a departure from the requirements specified in the Bidding Document; ii. "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and iii. "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.	
5.4	Nonmaterial Non conformities in Technical or Financial Bids	5.4.1	Provided that a Technical or Financial Bid is substantially responsive, the Procuring Entity may waive any non conformity (with recorded reasons) in the Bid that do not constitute a material deviation, reservation or omission.	
		5.4.2	Provided that a Technical or Financial Bid is substantially responsive, the Procuring Entity may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Request for information or documentation on such nonconformities shall not be related to any aspect of the Financial Proposal of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.	
		5.4.3	* Provided that a Technical or Financial Bid is substantially responsive, the Procuring Entity will rectify nonmaterial nonconformities or omissions (with recorded reasons). To this effect, the Bid Price shall be adjusted during evaluation of Financial Proposals for comparison purposes only, to reflect the price of the missing or nonconforming item or component. The adjustment shall be made using the method indicated in Section III, Evaluation and Qualification Criteria.	
5.5	Correction of Arithmetical Errors in Financial Bid	5.5.1	Provided that a Financial Bid is substantially responsive, the Bid evaluation committee shall correct arithmetical errors during evaluation of Financial Bid on the following basis: i. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected; ii. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and iii. if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.	

(Rajast	Rajasthan State Ganganagar Sugar Mills Limited)			
		5.5.2	If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.	
5.6	Preliminary Examination of Technical or Financial Bids	5.6.1	The Procuring Entity shall examine the Technical or Financial Bids to confirm that all documents and technical documentation requested in ITB Sub-Clause 3.3 [Documents Comprising the Bid] have been provided, and to determine the completeness of each document submitted.	
		5.6.2	The Procuring Entity shall confirm, following the opening of the Technical or Financial Bids, that the following documents and information have been provided: i. Bid is sealed & signed as per the requirements listed in the Bidding documents;	
			Bid is valid for the period, specified in the Bidding documents;	
			iii. Bid is accompanied by Bid Security;	
			 iv. Bid is unconditional and the Bidder has agreed to give the required performance Security; 	
			v. Price Schedules in the Financial Bids are in accordance with ITB Clause 3.4.	
			vi. written confirmation of authorization to commit theBidder;	
			vii. Other conditions, as specified in the Bidding Document are fulfilled.	
5.7	Responsive ess of Technical or Financial Bids	5.7.1	The Procuring Entity's determination of the responsiveness of a Technical or Financial Bid is to be based on the contents of the Bid itself, as defined in ITB Sub-Clause 3.3 [Documents Comprising the Bid].	
		5.7.2	A substantially responsive Technical or Financial Bid is one that meets without material deviation, reservation, or omission to all the terms, conditions, and specifications of the Bidding Document. A material deviation, reservation, or omission is one that: (a) if accepted, would- i. affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in Section V, Schedule of Supply; or ii. limits in any substantial way, inconsistent with the	
			Bidding Document ,the Procuring Entity's rights or the Bidder's obligations under the proposed Contract; or	
			(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.	

(Rajası	Rajasthan State Ganganagar Sugar Mills Limited)			
		5.7.3	The Procuring Entity shall examine the technical aspects of the Bid in particular, to confirm that requirements of Section V, Procuring Entity's Requirements have been met without any material deviation, reservation, or omission.	
		5.7.4	If a Technical or Financial Bid is not substantially responsive to the Bidding Document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.	
5.8	Examination of Terms and Conditions of the Technical or Financial Bids	5.8.1	The Procuring Entity shall examine the Bids to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or reservation.	
		5.8.2	The Procuring Entity shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clauses 3.3 [Documents Comprising the Bid] and to confirm that all requirements specified in Section V [Procuring Entity's Requirements] of the Bidding Document and all amendments or changes requested by the Procuring Entity in accordance with ITB Clause 2.3 [Amendment of Bidding Document] have been met without any material deviation or reservation.	
5.9	Evaluation of Qualification of Bidders in Technical Bids	5.9.1	The determination of qualification of a Bidder in evaluation of Technical Bids shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 3.8 [Documents Establishing the Qualifications of the Bidder] and in accordance with the qualification criteria indicated in Section III [Evaluation and Qualification Criteria].	
5.10	Evaluation of Financial Bids	5.10.1	The Procuring Entity shall evaluate each Financial Bid, the corresponding Technical qualified Bid of which has been determined to be substantially responsive	
		5.10.2	To evaluate a Financial Bid, the Procuring Entity shall only use all the criteria and methodologies defined in this Clause and in Section III, Evaluation and Qualification Criteria.	
		5.10.3	To evaluate a Financial Bid, the Procuring Entity shall consider the following: i. the Bid Price quoted in the Financial Bid; ii. price adjustment for correction of arithmetical errors in accordance with ITB Clause 5.5 [Correction of Arithmetical Errors];	
			iii. Adjustment of bid prices due to rectification of nonmaterial nonconformities or omissions in accordance with ITB Sub Clause 5.4.3 [Nonmaterial Nonconformities in Bids], if applicable.	
5.11	Comparison of Bids	5.11.1	The Procuring Entity shall compare all substantially responsive Financial Bids to determine the lowest-evaluated Financial Bid in accordance with ITB Sub-Clause 5.10 [Evaluation of Financial Bids].	

	than State Gangana		
5.12	Negotiations	5.12.1	To the extent possible, no negotiations shall be conducted after the pre-Bid stage. All clarifications needed to be sought shall be sought in the pre-Bid stage itself.
		5.12.2	Negotiations may, however, be undertaken only with the lowest Bidder under the following circumstances- i. when ring prices have been quoted by the Bidders for the subject matter of procurement; or ii. When the rates quoted vary considerably and considered much higher than the prevailing market rates.
		5.12.3	The Bid evaluation committee shall have full powers to undertake negotiations. Detailed reasons and results of negotiations shall be recorded in the proceedings.
		5.12.4	The lowest Bidder shall be informed about negotiations in writing either through messenger or by registered letter and e-mail (if available). A minimum time of seven days shall be given for calling negotiations. In case of urgency, the Bid evaluation committee, after recording reasons, may reduce the time, provided the lowest Bidder has received the intimation and consented to holding of negotiations.
		5.12.5	Negotiations shall not make the original offer made by the Bidder inoperative. The Bid evaluation committee shall have option to consider the original offer in case the Bidder decides to increase rates originally quoted or imposes any new terms or conditions.
		5.12.6	In case of non-satisfactory achievement of rates from lowest Bidder, the Bid evaluation committee may choose to make a written counter offer to the lowest Bidder and if this is not accepted by him, the committee may decide to reject and re-invite Bids or to make the same counter-offer first to the second lowest Bidder, then to the third lowest Bidder and so on in the order of their initial standing in the bid evaluation and work order be awarded to the Bidder who accepts the counter-offer.
		5.12.7	In case the rates even after the negotiations are considered very high, fresh Bids shall be invited.
5.13	Procuring Entity's Right to Accept Any Bid, and to Reject Any or All Bids	5.13.1	The Procuring Entity reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract award without assigning any reasons thereof and without there by incurring any liability to the Bidders.
6. A	ward of Contract	t	
6.1	Procuring Entity's Right to Vary Quantities	6.1.1	If the Procuring Entity does not procure any subject matter of procurement or procures less than the quantity specified in the Bidding Document due to change in circumstances, the Bidder shall not be entitled for any claim or compensation except otherwise provided in the Bidding Document.

(Rajas	Lajasthan State Ganganagar Sugar Mills Limited)			
		6.1.2	Order for additional quantity of an item of the Works upto 50 percent of the original quantity of that item in the Bill of Quantities and for extra items not provided for in the Bill of Quantities may be given but the amount of the additional quantities and extra items, taken together, shall not exceed 50 percent of the Contract Price.	
6.2	Acceptance of the successful Bid and award of contract	6.2.1	The Procuring Entity after considering the recommendations of the Bid Evaluation Committee and the conditions of Bid, if any, financial implications, samples, test reports, etc., shall accept or reject the successful Bid.	
		6.2.2	Before award of the Contract, the Procuring Entity shall ensure that the price of successful Bid is reasonable and consistent with the required specifications.	
		6.2.3	A Bid shall be treated as successful only after the competent authority has approved the procurement in terms of that Bid.	
		6.2.4	The Procuring Entity shall award the contract to the Bidder whose offer has been determined to be the lowest in accordance with the evaluation criteria set out in the Bidding Document if the Bidder has been determined to be qualified to perform the contract satisfactorily on the basis of qualification criteria fixed for the Bidders in the Bidding Document for the subject matter of procurement.	
		6.2.5	Prior to the expiration of the period of validity of Bid, the Procuring Entity shall inform the successful Bidder in writing, by registered post or email, that its Bid has been accepted.	
		6.2.6	If the issuance of formal letter of acceptance (LOA) is likely to take time, in the meanwhile a Letter of Intent (LOI) may be sent to the Bidder. The acceptance of an offer is complete as soon as the letter of acceptance or letter of intent is posted and/ or sent by email (if available) to the address of the Bidder given in the Bidding Document.	
6.3	Signing of Contract	6.3.1	In the written intimation of acceptance of its Bid sent to the successful Bidder, it shall also be requested to execute an agreement in the format given in the Bidding Document on a non-judicial stamp of requisite value at his cost and deposit the Performance Security within fifteen days from the date on which the LOA or LOI is dispatched to the Bidder.	
		6.3.2	If the Bidder, whose Bid has been accepted, fails to sign a written procurement contract or fails to furnish the required Performance Security within the specified time period, the Procuring Entity shall forfeit the Bid Security of the successful bidder and take required action against it as per the provisions of the Act and the Rules.	
		6.3.3	The Bid Security, if any, of the Bidders who's Bids could not be accepted shall be refunded soon after the contract with the successful Bidder is signed and his Performance Security is obtained. Until a formal contract is executed, LOA or LOI shall constitute a binding contract.	

	ajasthan State Ganganagar Sugar Mills Limited)			
6.4	Performance Security	6.4.1	Performance Security shall be solicited from the successful Bidder except State Govt. Departments and undertakings, corporations, autonomous bodies, registered societies, co-operative societies which are owned or controlled or managed by the State Government and undertakings of Central Government. However, a Performance Security Declaration shall be taken from them. The State Government may relax the provision of Performance Security in particular procurement.	
		6.4.2	(i) The amount of Performance Security shall be 5% or as specified in the BDS, of the amount of the Work Order. The currency of Performance Security shall be Indian Rupees, if otherwise not specified in BDS.	
		6.4.3	Performance Security shall be furnished in one of the following forms as applicable- (a) Bank Draft or Banker's check. (b) Bank guarantee. It shall be got verified from the issuing bank. Other conditions regarding bank guarantee shall be same as specified in ITB Sub-Clause 3.10 [Bid Security]; or (c) Fixed Deposit Receipt (FDR) of a Scheduled Bank. It shall be in the name of the Procuring Entity on account of Bidder and discharged by the Bidder in advance. The Procuring Entity shall ensure before accepting the Fixed Deposit Receipt that the Bidder furnishes an undertaking from the bank to make payment/ premature payment of the Fixed Deposit Receipt on demand to the Procuring Entity without requirement of consent of the Bidder concerned. In the event of forfeiture of the Performance Security, the Fixed Deposit shall be forfeited along with interest earned on such Fixed Deposit.	
		6.4.4	Performance Security furnished shall remain valid for a period of 90 days beyond the date of completion of all contractual obligations of the Bidder,	
		6.4.5	Failure of the successful Bidder to submit the above- mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Procuring Entity may either cancel the procurement process or if deemed appropriate, award the Contract at the rates of the lowest Bidder, to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Procuring Entity to be qualified to perform the Contract satisfactorily.	
		6.4.6	Forfeiture of Performance Security: Amount of Performance Security in full or part may be forfeited in the following cases:- i. when the Bidder does not execute the agreement in accordance with ITB Clause 6.3 [Signing of Contract] within the specified time; after issue of letter of acceptance; or	
			ii. when the Bidder fails to commence the Works as per Work order within the time specified; or	
			iii. when the Bidder fails to complete Contracted Works satisfactorily within the time specified; or	
			iv. when any terms and conditions of the contract is breached; or	
			v. to adjust any established dues against the Bidder from any other contract with the Procuring Entity; or	

during

process

procurement

(Rajasthan State Ganganagar Sugar Mills Limited) if the Bidder breaches any provision of the Code of Integrity prescribed for the Bidders specified in the Act, Chapter VI of the Rules and this Bidding Document. vii. Notice of reasonable time will be given in case of forfeiture of Performance Security. The decision of the Procuring Entity in this regard shall be final. 7. Redressal of Grievances during Procurement Process (Appeals) Grievance Any grievance of a Bidder pertaining to the procurement handling process shall be by way of filing an appeal to the First or procedure Second Appellate Authority, as the case may be, as

as given in Appendix A to these ITB.

specified in the BDS, in accordance with the provisions

of chapter III of the Act and chapter VII of the Rules and

Appendix A: Grievance Handling Procedure during Procurement Process (Appeals)

(1) Filing an appeal.- If any Bidder or prospective Bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issued there under, he may file an appeal to First or Second Appellate Authority, as the case may be, as may be designated for the purpose, within a period of ten days or such other period as may be specified in the pre-qualification documents, Bidder registration documents or Bidding documents, as the case may be, from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:

Provided that after the declaration of a Bidder as successful in terms of section 27 of the Act, the appeal may be filed only by a Bidder who has participated in procurement proceedings:

Provided further that in case a Procuring Entity evaluates the technical Bid before the opening of the financial Bid, an appeal related to the matter of financial Bid may be filed only by a Bidder whose technical Bid is found to be acceptable.

- (2) Appeal not to lie in certain cases. -No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely:
 - a) determination of need of procurement;
 - b) provisions limiting participation of Bidders in the Bid process;
 - c) the decision of whether or not to enter into negotiations;
 - d) cancellation of a procurement process;
 - e) Applicability of the provisions of confidentiality.

(3) Form of Appeal.-

- a) An appeal under sub-section (1) or (4) of section 38 shall be in the annexed Form along with as many copies as there are respondents in the appeal.
- b) Every appeal shall be accompanied by an order appealed against, if any affidavit verifying the facts stated in the appeal and proof of payment of fee.
- c) Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorized representative.

(4) Fee for filing appeal.-

- 1. Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.
- 2. The fee shall be paid in the form of bank demand draft or banker's Cheque of a Scheduled Bank payable in the name of Appellate Authority concerned.

(5) Procedure for disposal of appeals.-

- a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
- b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-
 - (i) hear all the parties to appeal present before him; and
 - (ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.
- c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
- d) The order passed under sub-clause (c) above shall be placed on the State Public Procurement Portal.

Annexure

FORM No. 1

[See rule 83]

Memorandum of	Appeal	under th	e Rajasthan	Transparency	in Public	Procurement	Act
2012							

Appeal Noof
Before the(First / Second Appellate Authority)
Particulars of appellant:
(i) Name of the appellant:
(ii) Official address, if any:
(iii) Residential address:
2. Name and address of the respondent(s):
(1).
(2).
3. Number and date of the order appealed against and name and designation of the officer / authority who passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:
4. If the Appellant proposes to be represented by are presentative, the name and postal address of the representative:
5. Number of affidavits and documents enclosed with theappeal:
6. Grounds of appeal:
(Supported by an affidavit)
7. Prayer:

Place
Date Appellant's Signature
RSGSM, Jaipur (Rajasthan)

SECTION-II: BIDDING DATA

The following specific data for the works shall complement, amend, or supplement the provisions in Instructions to Bidders — Section I. Whenever there is a conflict, the provisions herein shall prevail over those in the Instructions to Bidders.

INSTRUCTIONS TO BIDDERS CLAUSE REFERENCE

A. Introduction

A. Introduct	tion						
ITB. 1.1.1	NIB. NO:- RSGSM/IT/SCADA/23-24/8						
	The Procuri	ng Entity is: RSGSM, Ltd. Jaipur					
	Representative of procurement entity - GENERAL MANAGER,						
	Name of site: Project area includes RSGSM 8 no's Bottling units (RCs)- Package-1 (Jaipur, Bhilwara, Hanumangarh & Alwar) & Package-2 (Ajmer, Jodhpur, Kota, Udaipur) of Rajasthan.						
	Name of the work: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based SCADA / IoT system in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data						
	(Detailed requirement	Scope of work has been defined in S	ection V- Procuring Entity's				
	This Bid inv Procuring E	rited and this Bid document is issued by the intity.	e Representative on behalf of				
ITB1.1.2	Total Project Time-line:- Project should be complete in all respect. • Part A:- Survey, design, supply, Installation testing (SIT), commissioning, successful UAT/trail run of the Instrumentation, automation & SCADA/IoT software work including civil, mechanical & electrical work shall be completed within 10 months (300 days) from the date of purchase order.						
		his period shall be 6 years (First year Defe) after completion of the part A.	ects Liability Period (DLP) + 5				
1.1.3	Total estimated project cost :-						
	Sno. Package Estimated cost						
	01 Package 1 (Jaipur, Bhilwara, Hanumangarh & Alwar) Rs. 21.00 Crore						
	02 Package 2 (Ajmer, Jodhpur, Kota, Udaipur) Rs. 20.00 Crore						
	Total Esti	mated cost(without GST)	Rs. 41.00 Crore				

ITB 1.4.1	Bidders are allowed to bid as per conditions mentioned in Section-III (Evaluation & Qualification Criteria) of this tender document.
ITB 1.4.2	The Bidder shall have the nationality of India. Type of bidding is national Competitive Bidding.
ITB 1.4.3	The bidding process is open to bidders who fulfill the prescribed eligibility criteria.
ITB 1.4.4	<u>Determination of L1 bidder</u> :- Bidder shall quote the rates on TURNKEY basis for single package or both packages. L1 bidder shall be decided package wise. Only one Package (4RC) shall be awarded to one lowest bidder.

B. Bido	3. Bidding Documents				
ITB 2.1.2	The Invitation for Bids (NIB) issued by the Representative is also part of the Bidding Document.				
ITB 2.1.3	This is an "on-line tender". Therefore, tender documents in physical form shall not be available for sale but can be downloaded from the website. The bidder shall pay a non-refundable cost of bidding document of INR 5000+GST through Demand Draft drawn on any Scheduled/ commercial Bank in favor of "RSGSM Ltd. " payable at jaipur or through NEFT/RTGS details are as follows:-				
	Name	Rajasthan State Ganganagar Sugar Mills			
		Ltd., Jaipur			
	Account No	<u>25220200001309</u>			
	Name & Branch of Bank Bank of Baroda, Bais Godam, January Branch				
	BARB0INDBAI				
	Pay a non-refundable fee of INR 2,500 through Demand Draft drawn on any Sch Commercial Bank in favor of Managing Director, RISL. Technical bid should be accompanied with bid security as indicated in bid document.				
	·	,			
	Bidder will upload scanned copy of Tender Fee				
	Security document on e-procurement web site.				
	cified in bid document, in original, hard copies 000+18% GST (ii) Bid processing fee of INR SL, (iii) Bid Security as per RTPP (iv) MOU be bidder. ally submitted on or before last date & time of				
ITB 2.1.4	The Procuring Entity or the Representative is Bidding Document and its addenda, if they procurement portal or the State Public Procure	were not downloaded correctly from the e-			

(Rajasthan State Ganganagar Sugar Mills Limited)

(Rajastilari State Gariyariayar Suyar Millis Liffiteu)			
ITB 2.2.1	For Clarification purposes only, the Representative address is :		
	OFFICE OF GENERAL MANAGER, RSGSM LTD., JAIPUR 3rd Floor, Centre of Excellence for Revenue Research & Analysis, Jhalana dungari, Jaipur, Rajasthan- 302004 Website:- excise.rajasthan.gov.in		
	Email ld:-itcell.rsgsm@rajasthan.gov.in		
	Contact Person: Dy. Director(IT), RSGSM LTD, Jaipur		
	A Pre-bid Meeting will take place at the conference hall of RSGSM , Jaipur 3rd Floor, Centre of Excellence for Revenue Research & Analysis, Jhalana dungari, Jaipur, Rajasthan On 02/06/2023 At 11.00 AM No Site visit shall be organized by the procuring entity. However, bidder shall advise to visit the sites at their own expenses and if any support is required, shall be provided by the RSGSM.		
1TB 2.2.3	The Bidders are requested, to submit queries/ suggestions by mail, to reach the Representative preferably on or before the Pre-bid Meeting. However, Department may also consider queries/suggestions raised in writing only (in word format), during the Pre-bid Meeting. It is suggested to mail the question in soft copy (word format) also.		
ITB 2.2.4	Minutes of the Pre-Bid Conference, including the text of the questions raised, and the responses given, without identifying the source, will be transmitted promptly to all Bidders who attended the Pre-Bid Conference and shall also be placed on the State Public Procurement Portal and the e-procurement portal. Any modification to the Bidding Document that may become necessary as a result of the Pre-Bid Conference shall be made by the Representative through the issue of an addendum (part of Bid document) and not through the minutes of the Pre-Bid Conference.		
ITB 2.2.5	At any time prior to the deadline for submission of the Bids, the Procuring Entity through its representative, suomotto, may also amend the Bidding Document, if required, by issuing an addenda which will form part of the Bidding Document.		
ITB 2.3.1	All clarifications & Minutes of Pre bid meeting, any addendum/corrigendum issued shall be part of the Bidding Document and shall be uploaded on the State Public Procurement Portals http://sppp.rajasthan.gov.in/ and http://eproc.rajasthan.gov.in		
ITB 2.3.2	To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Entity through its representative may, at its discretion, extend the deadline for the submission of the Bids, pursuant to ITB Sub-Clause 4.2 [Deadline for Submission of Bids], under due intimation to the Bidders by uploading it on the State Public Procurement Portal and its e-procurement portal.		
C D	paration of Rids		

C. Preparation of Bids

ITB 3.2.1	The language of the bid shall be: English
ITB 3.3.1	The online Bid shall comprise of two parts submitted simultaneously, one containing the Technical Bid/ Proposal and the other the Financial or Price Bid/ Proposal.

ITB 3.3.2	The Bidder shall submit the forms, declarations and documents, as specified in section IV of Bid Document, with the Technical Bid:
ITB 3.3.3	The Bidder shall upload the following documents with its Financial Bid: a) Financial Proposal Submission Sheet/BOQ b) other details as mentioned in Sec IV
ITB 3.3.4	The Prices quoted by the Bidder shall be fixed for TURNKEY basis.
ITB 3.3.5	All taxes duties and variations in taxes duties shall be borne by the bidder except GST,GST will be paid extra as per prevailing norms of GST department.
ITB 3.3.6	The Bid validity period shall be 180 (One hundred and eighty days) days from deadline for submission of bids.
ITB 3.3.2	In exceptional circumstances, prior to the expiration of the Bid validity period, the representative may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing.
ITB 3.10. 2	Bid security shall be 2% of the value of the Bid, Rs. 82.0 Lacs (Eighty two Lacs only), as indicated in NIT for all bidders.

(Rajasthan State Ganganagar Sugar Mills Limited)

ITB 3.10. 3 This is an "on-line tender". Therefore, tender documents in physical form shall not be available for sale but can be downloaded from the website.

The bidder shall pay a non- refundable cost of bidding document of INR 5000+GST through Demand Draft drawn on any Scheduled/ commercial Bank in favor of "RSGSM Ltd." payable at jaipur or through NEFT/RTGS details are as follows:-

Name	Rajasthan State Ganganagar Sugar Mills	
	Ltd., Jaipur	
Account No	<u>25220200001309</u>	
Name & Branch of Bank	Bank of Baroda, Bais Godam, Jaipur	
	Branch	
IFSC Code	BARB0INDBAI	

Pay a non-refundable fee of INR 2,500 through Demand Draft drawn on any Scheduled/ Commercial Bank in favor of Managing Director, RISL.

Technical bid should be accompanied with bid security as indicated in bid document.

Bidder will upload scanned copy of Tender Fees, Processing Fees (RISL Cost) and bid

Security document on e-procurement web site.

The bidder should submit, by date & time specified in bid document, in original, hard copies of – (i) cost of the bidding document of INR 5000+18% GST (ii) Bid processing fee of INR 2,500/- in the name of Managing Director, RISL, (iii) Bid Security as per RTPP (iv) MOU (Annexure-E) (v) Annexure-C Declaration by the bidder

Note: Documents from (i) to (v) shall be physically submitted on or before last date & time of submission of bid.

ITB 3.11.

1

Only Digitally signed Bid shall be submitted through e-procurement website.

The written confirmation of authorization to sign on behalf of the Bidder shall consist of:
2 Power of Attorney

D. Submission and Opening of Bids

ITB 4.1.1 Bidders

Bidders shall submit their Bids to "the Representative" on-line only. "The Representative's" address for bid submission is:

OFFICE OF GENERAL MANAGER, RSGSM LTD., JAIPUR

3rd Floor, Centre of Excellence for Revenue Research & Analysis, Jhalana dungari, Jaipur, Rajasthan 302004

Website:- excise.rajasthan.gov.in

Email Id:-itcell.rsgsm@rajasthan.gov.in

Bidders shall submit their Bids electronically only (The Documents uploaded shall only be considered. No physical submission of documents is acceptable except the documents specified in Clause 2.1.3).

The Bidders shall submit the Bid online with all pages numbered serially and by giving an index of submissions. Each page of the submission shall be initialed by the Authorized Representative of the Bidder as per the terms of the tender. The Bidder shall be responsible for documents accuracy and correctness as per Bid document uploaded by the Representative and shall ensure that there are no changes caused in the content of the downloaded document. The bidder shall follow the following instructions for online submission:

- Bidder who wants to participate in bidding will have to procure digital certificate
 as per IT Act to sign their electronic bids. Offers which are not digitally signed
 will not be accepted. Bidder shall submit their offer in electronic format on
 above mentioned website after digitally signing the same.
- Cost of bid document is Rs.5000+GST, whereas the Bid Processing fee is Rs. 2500/-.
- The Procuring Entity or the Representative will not be responsible for any mistake occurred at the time of uploading of bid or thereafter.
- If holiday is declared on physical submission (depositing documents in hard copy) & opening date of tender the scheduled activity will take place on next working day.
- If holiday is declared on submission & opening date of tender the scheduled activity will take place on next working day.

Bids are required to be submitted on-line, it shall be submitted/uploaded on the e-procurement portal of state government: http://eproc.rajasthan.gov.in. The Bid security shall be paid in the name of "the Representative" as stipulated in tender document.

ITB 4.2.1 The Deadline for electronic Bid submission is 26/06/2023 Up To 6.00 PM

A Bidder may withdraw, substitute or modify its Bid after it has been submitted by submitting electronically on the e-procurement portal a written Withdrawal/ Substitutions/ Modifications etc. Notice on the e-procurement portal, duly digitally signed by the Bidder or his authorized representative, and shall include a copy of the authorization in accordance with ITB Sub-Clause 3.11.1 [Format and Signing of Bid]. The corresponding Withdrawal, Substitution or Modification of the Bid must accompany the respective written Notice. All Notices must be received by the

Representative on the e-procurement portal prior to the deadline specified for submission of Bids in accordance with ITB Sub-Clause 4.2. [Deadline for Submission of Bids].

ITB 4.4.1 The on-lir

The on-line Technical Bids shall be opened by the Bids opening committee constituted by the Representative in the presence of the Bidders or their authorized representatives, who choose to be present. The online Bid opening shall take place On 27/06/2023 At 12.30 PM at:

OFFICE OF GENERAL MANAGER, RSGSM LTD., JAIPUR

3rd Floor, Centre of Excellence for Revenue Research & Analysis, Jhalana dungari, Jaipur, Rajasthan 302004

	Website:- excise.rajasthan.gov.in Email ld:-itcell.rsgsm@rajasthan.gov.in
ITB 4.4.4	The Financial Bids shall be kept unopened until the time of opening of the Financial Bids. The date, time, and location of electronic opening of the Financial Bids shall be intimated to the bidders who are found responsive by the Representative in evaluation of their Technical Bids.
ITB 4.4.10	After completion of the evaluation of the Technical Bids, the Representative shall invite Bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified to attend the electronic opening of the Financial Bids. The date, time, and location of the opening of Financial Bids will be intimated through Eproc Automated Messaging System
ITB 4.4.11	The Representative shall notify Bidders whose Technical Bids have been rejected on the grounds of being substantially non-responsive and not qualified in accordance with the requirements of the Bidding Document.
ITB 4.4.12	The Bids opening committee shall conduct the electronic opening of Financial Bids of all Bidders who submitted substantially responsive Technical Bids and have qualified in evaluation of Technical Bids, in the presence of Bidders or their representatives who choose to be present at the address, date and time specified by the Representative as per e-tendering procedure.
ITB 5.1.4	In addition to the restrictions specified in section 49 of the Act, the Procuring Entity through its Representative, while procuring a subject matter of such nature which requires the procuring Entity through its Representative to maintain confidentiality, may impose condition for protecting confidentiality of such information.
ITB 5.4.2	Provided that a Technical or Financial Bid is substantially responsive, "The Representative" may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Request for information or documentation on such nonconformities shall not be related to any aspect of the Financial Proposal of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
ITB 5.4.3	* Provided that a Technical or Financial Bid is substantially responsive, "The Representative" will rectify nonmaterial nonconformities or omissions (with recorded reasons). To this effect, the Bid Price shall be adjusted during evaluation of Financial Proposals for comparison purposes only, to reflect the price of the missing or non- conforming item or component. The adjustment shall be made using the method indicated in Section III, Evaluation and Qualification Criteria.
	* [This ITB Sub-Clause should be kept only when considered necessary]

ITB 5.5.1	Provided that a Financial Bid is substantially responsive, the Bid evaluation committee shall correct arithmetical errors during evaluation of Financial Bid on the following basis: i. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity or its Representative there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected; ii. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and iii. if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.	
ITB 5.6.1	"The Representative" shall examine the Technical or Financial Bids to confirm that all documents and technical documentation requested in ITB Sub-Clause 3.3 [Documents Comprising the Bid] have been provided, and to determine the completeness of each document submitted.	
ITB 5.6.2	All documents as stated in NIB to be submitted in physical form to the prospective bidder up to stipulated date and time as indicated in detailed NIB.	
ITB 5.7.1	"The Representative" determination of the responsiveness of a Technical or Financial Bid is to be based on the contents of the Bid itself, as defined in ITB Sub-Clause 3.3 [Documents Comprising the Bid].	
ITB 5.7.4	If a Technical or Financial Bid is not substantially responsive to the Bidding Document, it shall be rejected by the Representative and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.	
ITB 5.8.1	"The Representative" shall examine the Bids to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or reservation.	
ITB 5.8.2	"The Representative" shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clauses 3.3 [Documents Comprising the Bid] and to confirm that all requirements specified in Section V [Procuring Entity's Requirements] of the Bidding Document and all amendments or changes requested by the Representative in accordance with ITB Clause 2.3 [Amendment of Bidding Document] have been met without any material deviation or reservation.	
ITB 5.10.1	"The Representative" shall evaluate each Financial Bid, the corresponding Technical Bid of which has been determined to be substantially responsive	
ITB 5.10.2	To evaluate a Financial Bid, "the Representative" shall only use all the criteria and methodologies defined in this Clause and in Section III, Evaluation and Qualification Criteria. No other criteria or methodology shall be permitted.	
ITB 5.10.3	To evaluate a Financial Bid, "the Representative" shall consider the following: i. the Bid Price quoted in the Financial Bid; ii. price adjustment for correction of arithmetical errors in accordance with ITB Clause 5.5 [Correction of Arithmetical Errors];	

(Rajasthan State Ganganagar Sugar Mills Limited)

	Adjustment of bid prices due to rectification of nonmaterial nonconformities or omissions in accordance with ITB Sub Clause 5.4.3 [Nonmaterial Nonconformities in Bids], if applicable.
ITB 5.10.4	If the Bid, which results in the lowest evaluated Bid Price, is considered to be seriously unbalanced, or front loaded, in the opinion of the Procuring Entity or its Representative, the Procuring Entity or its Representative may require the Bidder to produce detailed rate analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those rates with the construction methods and schedule proposed. After evaluation of the rate analysis, taking into consideration, the schedule of estimated Contract payments, the Procuring Entity or its Representative may require that the amount of the Performance security be increased at the cost of the Bidder to a level sufficient to protect the Procuring Entity or its Representative against financial loss in the event of default of the successful Bidder under the Contract.
ITB 5.11.1	"The Representative" shall compare all substantially responsive Financial Bids to determine the lowest-evaluated Financial Bid in accordance with ITB Sub-Clause 5.10 [Evaluation of Financial Bids].
ITB 5.13.1	The Procuring Entity or its Representative reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract award without assigning any reasons thereof and without there by incurring any liability to the Bidders.

E. Award of Contract

E. Award of Contract		
ITB 6.2.1	The Procuring Entity or its Representative after considering the recommendations of the Bid Evaluation Committee and the conditions of Bid, if any, financial implications, samples, test reports, etc., shall accept or reject the successful Bid.	
ITB 6.2.2	Before award of the Contract, the Procuring Entity or its Representative shall ensure that the price of successful Bid is reasonable and consistent with the required scope and specifications.	
ITB 6.2.6	The work order or Letter of Intent (LOI) or letter of acceptance (LOA) shall be issued by the Procuring Entity or its Representative	
ITB 6.3.1	The period within which the Performance Security is to be submitted by the successful Bidder and the Contract Agreement is to be signed by him from the date of issue of Letter of Acceptance is 15 Days. Contract Agreement has to be signed with the Procuring Entity. The performance security shall be submitted to value 5% of the awarded contract value of work.	
ITB 6.3.2	If the Bidder, whose Bid has been accepted, fails to sign a written procurement contract or fails to furnish the required Performance Security within the specified time period, the Representative shall forfeit the Bid Security of the successful bidder and take required action against it as per the provisions of the Act and the Rules.	
ITB 6.3.3	"The Representative" shall promptly return the Bid Security after the earliest of the following events, namely:	

	The expiry of validity of bid security	
	The execution of agreement for procurement and performance security is furnished by the successful bidder;	
	The cancellation of the procurement process; or	
	 The withdrawal of bid prior to the deadline for presenting bids, unless the bidding documents stipulate that no such withdrawal is permitted. 	
ITB 6.4.2	Performance Security amounting to total 5% of awarded contract value (including O&M cost) shall be submitted / deducted as follows:	
	(i) Bidder shall submit Performance Security @ 5% in advance at the time of signing of agreement in form of BG as per latest rules under RTPP act. The BG should be issued by any nationalized / schedule bank and shall remain valid up to 90 days beyond satisfactorily O&M period. Bank Guarantee submitted against the performance guarantee, shall be unconditional and en-cashable or invokable at the Jaipur when presented in specified Branch Office.	
	(ii) The Performance Security shall be submitted for the value 5% of the awarded Contract amount of the work (including O&M cost).	
	(iii) If there is no reason to retain the Performance Security, it shall be returned back to the bidder within 90 days after the satisfactory completion of the O&M period.	
ITB 6.4.5	Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Representative may either cancel the procurement process or if deemed appropriate, award the Contract at the rates of the lowest Bidder, to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Representative to be qualified to perform the Contract satisfactorily.	
ITB 7.1	First Appellate Authority shall be: Joint Secretary, Finance (Excise) Second Appellate Authority shall be: Secretary, Finance (Budget) & Commissioner, Agriculture	

SECTION III: QUALIFICATION CRITERIA

A. Qualification Criteria:-

1. Eligibility:

Eligibility Criteria	Requirement	Documentary proof
i) Nationality	National firm	Bidder should submit GST registration certificate and other document (if required) in evidence document (if required) in evidence.
ii) Conflict of Interest	No conflicts of interest in accordance with ITB Sub-clause 1.4.3	Bidder should submit Annexure - A on his letter head that "He has not a conflict of interest in the procurement in question as stated in the Rule 81 of RTPP and this Bidding document".
iii) Bidder should not Debarment/ blacklisted by any Procuring Entity	Must declared by bidder on letter head	Bidder should submit Annexure - B_on his letter head that "He has not Debarment/ blacklisted by any Procuring entity.

2. Experience:

2.1 Bidder should have experience of followings in last seven financial years (2016-17 to 2022-23); experience in current year shall also be counted up to deadline for submission of bid:-

Criteria	Documentary proof
(i) Experience of Supply, installation, Commissioning of Mass flow meter based custody transfer metering skid and radar type level transmitter and integration with PLC/DCS & work for unloading/loading terminals/tanks. (ii) Experience of Supply, installation, Commissioning of Data acquisition/SCADA software having capability of level/ Batch management.	Bidder should submit Work / Purchase order along with either completion Certificate obtained from client OR certificate of Charted Accountant with clearly stated that bidder having relevant experience mentioned in clause no. (i) & (ii) for

Section-III: Evaluation & Qualification Criteria

(Rajasthan State Ganganagar Sugar Mills Limited)

2.2 The bidder should have experience of the following in last seven financial years (2016-17 to 2022-23); experience in current year shall also be counted up to deadline for submission of bid:

Criteria	Compliance
Bidder should have experience of completed of one single similar kind of work having minimum 40% of total estimated cost of the project. OR Bidder should have experience of completed of two similar kind of works each having minimum 30% of total estimated cost of the project. OR Bidder should have experience of completed of three similar kind of work each having minimum 25% of total estimated cost of the project.	a. For similar work experience, The bidder shall submit Copies of Purchase order/WO along with either completion certificates OR duly Certified copy of bill / Invoice in support of their experience claims. Works of Govt. /PSU/SPV/Autonomous bodies under government sector /other than government works in India shall be considered. b. In case bidder submits other then govt. entity works/projects experiences, then, in the support of experience claims, bidder has to be submitted CA certificate, which showed that bidder has received claimed project amount as per balance sheet. Bidder shall also submit copies of work orders, agreements and completion Certificates.

Note:-

i. <u>Definition of similar kind of work:</u> Design, Supply, Installation, Testing, and Commissioning of the mass flow meter/skid system, Level transmitter and other industrial automation instruments successful integrated & work with PLC/DCS based SCADA/IoT Software in Alcohol bottling /Distillery/Brewery/ethanol/Refineries/Oil & Gas Industries/Edible Oil plants."

ii. For the purpose of qualification, following shall be considered as one similar work:-

a. A single purchase order value.

OR

b. Total Value of Separate orders for similar kind of work for the same project finalized under one tender.

OR

c. Total Value of the similar kind of work carried out at multiple locations through a single Purchase order or multiple purchase orders finalized against one tender

2.3 The Bidder should have additional specific experience of the following shall also be submitted along with bid:

Criteria	Compliance Requirements
a) Bidder or its OEM should submit certification from Indian weights and measurement under Legal Metrology dept. of India for mass flow meter and radar type level transmitter model/series, which should fulfil the technical specifications as per Annexure-P & Q, which is mentioned in bid documents, bidder has to submit the relevant certificates along with the technical bid. AND b) Bidder or OEM having operation & maintenance facilities & service Centre for instruments located in India since 5 year.	a) Bidder should submit a certificate issued by Legal Metrology dept., Govt. of India, issued for mass flow meter model (quoted mass flow model name by bidder) AND radar type level transmitter (quoted radar type level transmitter model name by bidder), these model shall fulfill the specifications mentioned in Annexure-P & Q of section III of bid document. For verification quoted mass flow meter model & radar level transmitter catalogue with duly seal and signed by OEM has to be submitted. b) Relevant document shall be submitted by the bidder.
b) Bidder should have Calibration facility shall be based on Gravimetric Methodology as per ISO 4185 /ISO 17025 approved by Govt. OR	Bidder should submit necessary accreditation certificate.
Bidder who do not have facility for Gravimetric calibration then bidder shall submit the ISO/IEC 17025 accreditation certificate from FCRI/ other certified approved lab for calibration by NABL	

3. Financial Criteria:-

Criteria	Compliance
i. Net Worth:- Bidder should have positive Net Worth for the Financial Year 2022-23 . If the final accounts of 2022-23 are not prepared, the bidder should have positive net worth for financial year 2021-22.	Bidder should submit certificate of Chartered Accountant showing calculation of Net Worth.
ii. Turnover:- The bidder should have minimum average annual turnover of INR 25.0 Cr. (Twenty Five Crore) for best 03 years turnover from last 5 financial years i.e. 2018-19, 2019-20, 2020-21, 2021-22 and 2022-23. If the final accounts of 2022-23 are not prepared, the bidder firm may submit turnover of 2017-18.	Bidder should submit audited balance sheets of the last five financial years and Certificate of Charted Accountant clearly indicating that turnover.

Section-III: Evaluation & Qualification Criteria (Rajasthan State Ganganagar Sugar Mills Limited) **NOTE: -**

- a. <u>Definition of Bidder:</u> Bidder shall be legal entity under the Indian govt. Law having complete solution provider, Which fulfills the Technical Qualification Criteria by their own credentials. Who have authorized by the OEM specific for this bid before closing date of the NIB for back-to-back service & guarantee support, in this case bidder shall make Memorandum of Understanding (MOU) on Rs. 1000 non-judicial stamp paper with OEM of Mass flow meter & Radar type level transmitter manufacture as per enclosed format. MOU should be submit along with technical bid, without its bid shall not be considered and technically disqualified.
- b. <u>Definition of OEM</u>:-OEM for the purpose of this tender is the one who on its own or through its affiliates manufactures products or equipment. It shall be represented through a registered office in India having fully equipped trained manpower to extend after-sales support and services. The term "Affiliates" shall mean any and all other companies which are in relation to the OEM, its holding company or any company, which is controlled by that holding company. OEM should be manufacturer of both custody mass flow meters and also manufacturer of Radar type level transmitter as per specifications mentioned in Annexure-P & Q of this section of bid document.
- c. The certificate of CA regarding Turn over, net worth must be submitted as per requirement otherwise bid shall not be considered. The certificate should clearly show the calculation of Turnover, net worth as per tender requirement.

All required supporting documents to fulfill the above eligibility shall be submitted along with the technical bid. (Balance sheet / Annual Report, Group company declaration etc.)

Section-IV: Bidding Forms

(Rajasthan State Ganganagar Sugar Mills Limited)

Annexure-P:-

Mass Flow Meter

Mass	Flow Meter should	I fulfill following Requirements:-		
i.	Туре	Microprocessor based Coriolis mass flow and density transmitter. (dual tube)		
ii.	Transmitter	Integral to sensor		
iii.	Sensor tube	Dual tube SS316L / SS 904L		
iv.	Wetted parts	SS316L / SS 904L		
V.	Flow direction	Bi-directional		
vi.	Output	Inbuilt Flow (mass/volume), density, temperature, Alcohol Concentration in built		
vii.	Mass/volume accuracy	+/- 0.1% of reading		
viii.	Density	+/- 0.0005 gm/cc		
ix.	Repeatability	+/- 0.05% of. Reading		
X.	Local display	4-line, LCD display with touch control		
xi.	Data Outputs/Input	Frequency - 10 KHz		
xii.	Functionality	4-20mA Interface to temperature for compensation.		
xiii.	Communicatio n interface	Modbus RS485, WLAN Capability for Configuration and Diagnostics.		
xiv.	Ingress protection	IP67		
XV.	Approval	Hazardous approval IIA/B, Indian Weights & Measure		

Annexure-Q:-

Radar type level transmitter

Measuring Principle	Frequency Modulated Continuous Wave (FMCW)/ Pulse Time of Flight
Process Connection	ANSI B16.5 CI 150
Output	2 Wire 4-20mA HART
Display	4-line Display with Push Button
Housing	Die Cast Aluminum
Accuracy	+/- 1mm (factory Accuracy)
Measuring Range	20 Mtr
Pressure	-1 to 3 Bar
Temperature	-40 to 100 Deg-C
Ingress Protection	IP66
Area Approval	Hazardous approval IIA/B
Mounting	On top of vessel over flanged nozzle

SECTION-IV: BIDDING FORMS

<u>CHECK LIST (TECHNICAL BID)</u> <u>To be filled by the bidder</u>

In addition to the forms given in this section, a Technical Proposal must necessarily contain the following; otherwise the bid shall be considered incomplete and may lead to non-responsive.:

S	Particulars	Details to be Filled By	Pg. No.
N		Bidder	
1.	Name of the Bidder Firm		
	Name of the Owner		
2.	(Enclose verification from respective bank/ Partnership		
	Deed/Memorandum of Articles and Association etc.)		
	beed/Memorandum of Articles and Association etc.)		
3.	Office Address,		
	Phone No,		
	Mobile,		
	Email,		
	Website (if any)		
4.	Bidder shall be legal entity under the Indian govt. Law having		
	complete solution provider, Which fulfills the Technical		
	Qualification Criteria by their own credentials.		
	(Proprietorship Firm/ Partnership Firm/ Registered Company)		
	(Enclose Copy of relevant Documents)		
5.	GSTIN		
	(Registration with the Sales Tax Department)		
	(Enclose Copy of Certificates of GSTIN)		
6.	Income Tax Permanent Account No.		
	(Enclose copy of PAN No.)		
7.	QUALIFICATION CRITERIA (Please refer Section III) Bidder should		
	have enclosed all required documents with own credential on		
	following points :- (Enclose Copy of relevant Documents)		
	a. Eligibility		
	i. Nationality		
	ii. Conflict of Interest		
	iii. Bidder should not Debarment/ blacklisted by any		
	Procuring Entity		
	b. Experience		
	Bidder should have experience as per clause no. 02 at point		
	no. 2.1, 2.2 & 2.3 mentioned in section III (Evaluation &		
	Qualification Criteria) c. Financial Criteria		
	a) Net worth:- As per clause 3.1		
0	b) Turnover:- As per clause 3.2		
8.	Bid Document Fee/ Bid Processing Fee/ Bid Security Amount		
	(Mention Details)		

Section-IV: Bidding Forms

(Rajasthan State Ganganagar Sugar Mills Limited)

9.	Duly Signed bid document	
10.	No Conflict of interest (Annexure A)	
11.	Self Declaration – No blacklisting/ Debarred (Annexure-B)	
12.	Declaration by the bidder (Annexure-C on Rs. 100 Non-judicial	
	stamp paper)	
13.	Name of hardware and Technical Specification compliance	
	sheet (ANNEXURE-D)	
14.	Bidder should submit MOU with OEM for back to back	
	support & warranty etc, on non judicial stamp of Rs. 1000/-	
	(As per Annexure - E)	
15.	· · · · · · · · · · · · · · · · · · ·	
	should comply the Rule 13 of the Rajasthan Transparency in Public	
	(RTTP) Rules, 2013 and Government of Rajasthan Notification No.	
	F.2(1) FD/G&T SPFC/2017 dated 01.01.2021,15.01.2021 and	
	30.03.2021 regarding prior registration with Industries Department for	
	bidders with beneficial ownership from countries sharing land border	
	with India, for participation in any public procurement in the State.	
	(Documents proof should submit along with Bid.)	
16.	Valid authorization for authorized signatory of bid	
	documents (Power of attorney/ board resolution/ letter of	
	authorization under signature of competent authority on the	
	letter head of the company/ firm.)	

Please Note: All the Copies Submitted should be duly attested/Certified by a Gazetted Officer/Notary public / Oath Commissioner/Self Attested)

Bidder's Qualification

To establish its qualifications to perform the contract in accordance with Section III (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

Bidder's Information Sheet

BIDDER'S INFORMATION			
Bidder's legal name			
legal name of OEM mentioned in MOU			
Bidders country of constitution.			
Bidders year of constitution			
Bidders legal address in country of constitution			
Bidders authorized representative(name, address, mobile numbers, e- mail address)			
Attached are self attested copies of the following documents:			

- 1. Certificate of registration/ incorporation and memorandumof association or constitution of the legal entity named above.
- 2. Authorization to represent the Bidders named in above.
- 3. Bidder has to submit MOU as per tender requirement.

Experience Form: Experience as per clause no. 02 at point no. 2.1, 2.2 & 2.3 mentioned in section iii.

Bidder must fill in this form

GENERAL CONSTRUCTION EXPERIENCE								
Starting Month Year	Ending Years Month Year		n Year Month		Contract Identification and Name Name and Address of Procuring Entity	Role of Bidder		
			Brief Description of the Works Executed by the Bidder					

Bidder Must Enclose: Proof of documents

Form: Experience similar kind of works

Fill up one (1) form per contract

Contract with Similar Key Activities			
Contract No of	Contract Identification		
Award Date		Completion Date	
Total Contract Amount		Equiva	lent INR
Bidder specify participation of total contract amount	Percent of Total	Amount	
Employer's Name		l	
Address			
Telephone Number			
Fax Number			
E-mail			
Description of the key activities in ac	cordance with Criter	ia.	
(i) Experience			
Reference page No., copy of work order (in case of PSU agreement/work order) and completion & commissioning certificate in support of above experience:			

Annexure 'E'

FORMAT OF MEMORANDUM OF UNDERSTADING (MOU)

(Any change in the language of this MoU shall not be accepted, if any bidder changes language, then his bid will be declared disqualified)

FORMAT F	FOR	MEMORA	NDUM	OF	UNDERST	ADING	(MOU)	with	OEM	OF	MASS	FLOW	METER
AND RADA	AR LI	EVEL TRA	NSMIT [*]	ΓER									

WITNESSETH

WHEREAS the firm is in the business of execution of projects and who have authorized by the OEM on or before last submission date of this bid, authentic documents has to be submitted along with technical bid

WHEREAS OEM is in the business of Manufacturing which adheres with norms as prescribed under this tender.

This **MEMORANDUM OF UNDERSTADING** is executed specifically for the said work/project and cannot be used for any other Works/ Project.

AND

The Firm is submitting its bid as bidder, to fulfill the tender requirement bidder entered into a **MEMORANDUM OF UNDERSTADING** with the OEM to fulfill the requirement of Mass Flow meters and Radar type Level Transmitters as per specification Annexure-P & Q of Section III (Qualification Criteria's) of tender document..

We "Name of Bidder....." hereby enter into
MOU with " Name of OEM:....." for supply, services of the mass flow
meters and Radar type Level Transmitter as per tender terms and conditions.

OEM agrees to provide full support to the Firm for supply, services of the mass flow meters and Radar type Level Transmitter. IN WITNESS WHEREOF OEM have signed this MoU on the day, month and year mentioned above.

Now, therefore both the parties hereto agree as follows:

- i. The OEM shall provide following Services and product to firm.
- a) Supply of mass flow meters and Radar type Level Transmitter as part of the **MOU** along with back-up guarantee for performance as per the tender requirement.
- b) OEM hereby confirm to provide guidelines for installation, testing, commissioning, repair/ replacement of mass flow meters and Radar type Level Transmitter and same should be carried out as per instruction from the respective Original Equipment Manufacturer (OEM). Further OEM certify that the installation is carried out as per technical requirements and found correct. We declare that we are the original manufacturer of the Mass flow meter and Radar type level transmitter as per Annexure-P and Annexure-Q of Section III (Evaluation & Qualification Criteria's) of tender document and agrees to provide full support for supply, installation, calibration and services of the Mass flow meter and Radar type level transmitter during execution, DLP and O&M period.

RSGSM, Jaipur (Rajasthan)

Section-IV: Bidding Forms
(Rajasthan State Ganganagar Sugar Mills Limited)

- c) OEM hereby confirms that their technical qualified person will visit the site during installation /replacement of the mass flow meters and Radar type Level Transmitter & other technical support as and when required by the client.
- ii. Disputes if any arising in connection with this agreement shall be settled mutually and amicably between the Parties herein through their respective senior executive without making reference to the arbitration.
- iii. This Memorandum of Understanding shall be effective from the date as mentioned in the first page of the Memorandum of Understanding and shall remain valid till the completion of O&M period and shall terminate on the happening of any of the following:
- a. The bid submitted by the Firm rejected or is unsuccessful in the bid.

This Memorandum of Understanding shall be subject to the laws in India and shall be subject to the jurisdiction of the court at Jaipur, Rajasthan.

iv. The MOU shall form the part of contract agreement.

For the sake of correspondence, following Addresses and the Persons concerned are to be Contacted:

Firm	
	The OEM
Address:	Address:
Mobile No:	Mobile No:
E-mail id.	E-mail id.
Contact Person:	Contact Person:
Designation	Designation

For **the Firm** for the **OEM**

(Authorized Signatory)	(Authorized Signatory)
Name:	Name:
Designation:	Designation
Witness-1	•
Witness-2	

Annexure-C

Declaration by the Bidder (Bidder shall submit on 100/- non judicial stamp paper)

In relation to our Bid submitted to	[enter designa	tion and address	of the
procuring entity/"the representative"] for procure	ment of	[Insert	name
of the Works] in response to their Notice Invit	ing Bids No	Dated	we
hereby declare under Section 7 and 11 of the	Rajasthan Transpa	rency in Public	
Procurement Act, 2012, that;	,	•	

- 1. We possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entity;
- 2. We have fulfilled our obligation to pay such of the taxes payable to the Central Government or the State Government or any local authority, as specified in the Bidding Document;
- 3. We are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and are not the subject of legal proceedings for any of the foregoing reasons;
- 4. We do not have, and our directors and officers not have, been convicted of any criminal offence related to our professional conduct or the making of false statements or misrepresentations as to our qualifications to enter into a procurement contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
- 5. We do not have a conflict of interest as specified in the Rajasthan Transparency in Public Procurement Act, the Rajasthan Transparency in Public Procurement Rules and this Bidding Document, which materially affects fair competition;
- 6. We have complied and shall continue to comply with the Code of Integrity as specified in the Rajasthan Transparency in Public Procurement Act, the Rajasthan Transparency in Public Procurement Rules and this Bidding Document, till completion of all our obligations under the Contract.

Date:	Signature of Bidder
Place:	Name:
	Designation:
	Address:

SECTION-V: OBJECTIVE OF THE PROJECT, SCOPE OF WORK & GENERAL TECHNICAL SPECIFICATIONS

OBJECTIVE OF THE PROJECT:

The Excise Policy 2023-24 has given a mandate that Production and Dispatches of liquors and beer in all manufacturing units of Rajasthan shall be controlled electronically through SCADA / IoT. The objectives towards above decision is to capture all sorts of data in digital form on real time basis of all their manufacturing processes of distilleries, breweries and bottling plants which are required by Excise Department for controlling and managing as per provisions of the Excise Act and Rules. After capturing online and real time data from manufacturing units, the units will be supervised centrally by the Excise Department. In compliance of above said policy, RSGSM inviting Online bid from reputed Total Solution Provider having sufficient experience and own credentials for successful implementation of SCADA/IoT system in RSGSM bottling plants (R.C.).

- <u>existing Infrastructure and record maintained at R.C.:</u> The following infrastructure exists for bottling plants of RSGSM are spirit tanker unloading, gauge rod for manual measurement of the dip of spirit tanker/ VAT's, spirit storage in VAT's, VAT's for blending, water input from RO plant, transfer of spirit through pipelines, day holding tank for daily production, ON/ OFF manual valves & Electric motor. All the above infrastructure process is performing manually. for monitoring the quantity and strength of spirit the following registers are being maintained & parameters are measured manually:-
 - > **D-18:-** Receipt of spirit tanker with volume and strength.
 - **CLW-1:-** Storage volume of spirit with strength.
 - > CLW-2:- Blended liquor (spirit + water) for production.
 - > **D-13:-** Finished goods & issued qty.

Existing Raw Material and Production process:-

i) Spirit Tanker receipt at RC (Inlet Point):

- Manual measurement of the dip of spirit tanker by and sample for quality measurement.
- ➤ If sample is passed, Spirit tanker unloading into the storage VAT else resampling or return to supplier.
- Receipt of spirit tanker with sample qty, volume and strength recorded in D-18 register.

ii) Spirit storage in VATs:

- Spirit inventory managed VAT wise.
- Dip of Spirit/ Blended material is measured by Guage rod .
- ➤ VAT wise record is kept in register called CLW-1 with quantity and strength.

iii) Transfer Spirit for blending:

- > Transfer spirit from storage vat to blending vat for making variety.
- > RO Water is transfer manually to blending vat.
- ➤ All record is kept in register called CLW-2 with quantity and strength.

iv) Blending Process:

- Mixing of the water, spirit and others items according to brands and segment.
- ➤ Blending process is running 24 to 72 hours for CL/RML varieties. In case of RML.
- In case of RML essence and colour is also used in blending process.
- In some CL brands, essence of gulab is also for two to three locations of RSGSM.
- In RHL (Royal Heritage Liquor) many kind of material (raw masalas) used for fermentation.
- ➤ All record is kept in register called CLW-2 with quantity and strength.

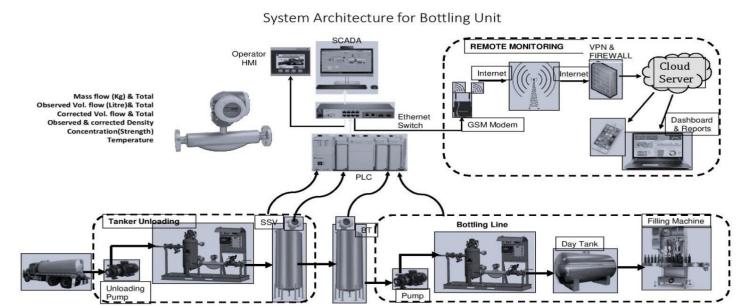
iv) Transfer blending material into day holding tank for production (Outlet Point):

Manually blended material transfer to day holding tank through motor.

Issuance of ready stock from Day holding tank to filling lines.

<u>Measurement of the Specific Parameters:</u>- To measure the main parameters volume & strength/concentration of the spirit and finished goods by measuring sub-parameters like Density, Temperature, Levels in Vats, Pressure, PH and TDS etc.

Proposed system architecture



- SCOPE OF WORK FOR BIDDER:- Brief scope of work as under but not limited to the following activities:
 - i. Design, Construction, supply, installation, testing and commissioning (Civil, Mechanical, electrical, instrumentation, development of required software's Hardware & other necessary works) of automation and online data monitoring, controlling and data transferring to centralized server in specified format using PLC/DCS based SCADA/IoT technology in 08 Bottling RCs (Reduction centres) under package wise work in different locations in RSGSM including all required associated works, modification in existing pipe network for unloading of spirit / ENA, transfer pipe (Spirit/ENA/Blending), fixing/installation arrangements components/ instruments/units in existing system etc including all required miscellaneous Installation and commencing required instruments/components/units for data monitoring, transferring, controlling and operate the components/instruments/units through auto mode with PLC/DCS based SCADA/IoT system including necessary Hardware and software for data collection, transferring, control/operate the installed system automatically and online monitoring of required data remotely including all required associated works etc, including 5 years O&M after one year DLP of all components to be installed under this project on Turnkey basis (hereinafter referred as Projector Project components).
 - ii. Proposed works under this contract have to be installed in existing RSGSM RCs (Reduction centres) under this package/ work. At present all RCs are in working in manual mode. Scope of works include to fix/ install of all required components/instruments/units at appropriate locations in existing system to achieve desired outcomes of project to operate the unit components in auto mode and can

- monitored and controlled centrally through PLC/DCS based SCADA/IoT as per approved P&ID by designated representative of RSGSM.
- iii. It is suggested to bidder that his team has to visits the project area site/existing RCs before quoting the rates.
- iv. Design, construction, supplying, installation, testing, trial run and commissioning of all project components including but not limited to all Civil, Pipeline, pumps, motors, other Electro- Mechanical equipments, Instrumentation, server and work station (computer system), PLC-SCADA/IoT system, development of required software's and synchronization system with central Control Room server, panel area; control room construction at each RC, maintenance bay/ loading unloading bay; all allied works complete in all respect.
- v. Supply , Installation, Testing and Commissioning IoT Device/ Technology/Programming for transfer continuous real time data of quantity and strength of RS/ENA received, quantity and strength of RS/ENA in storage, Quantity and strength of final Product etc. from individual RC SCADA sever to excise department central server in desired format provided by excise department.
- vi. Survey, reports & documentation, P&ID of existing RCs, P&ID of proposed works with detail design & drawings of project components and software's including civil, mechanical, electrical and instrumentation/automation of all project components.
- vii. Survey, reports & documentation, P&ID of existing RCs, P&ID of proposed works with detail design & drawings of project components and software development works shall be executed as per direction of designated representative of RSGSM, no extra payment shall made to bidder for revisions of design, drawings, data collections, all types of investigations, etc required up to satisfaction of designated representative of RSGSM.
- viii. All project components shall be designed in such ways that complete project/project components shall be automatic and can be controlled and monitored by PLC SCDA/IoT.
- ix. For unloading the ENA/RS tankers all arrangement shall be made by bidder including Connections, pipe pump, valves, and necessary accessories and arrangements etc up to inlet skid are under scope of bidder.
- x. Separate Management, monitoring, controlling, operation and data transferring software has to be developed under this project for each RC for maintain/monitor/operate of project components and existing infrastructure also in respect of manpower, ENA/RS storage, product, calibration and to monitor other activities for each RC for online management/monitoring of all required inventories/parameters used/received from individual RC, software has to be synchronize with PLC-SCADA/IoT also as per direction of designated representative of RSGSM.
- xi. All the designs and drawings of the all project components are required to be approved from MNIT, Jaipur & also representative of RSGSM at bidder's cost, All design, drawing and specifications shall be executed by considering the following but not limited to (a) quality and quantity of input raw material (b) requirement of Excise/RSGSM updated guidelines or etc (c) safety and durability of equipments (d) Safety of personnel (e) environment and health parameters as per international standards (f) process optimization. All design, drawing and specifications shall be prepared as per satisfaction or direction of designated representative of RSGSM and MNIT, Jaipur. In case MNIT has changed the design and drawing is not acceptable to designated representative of RSGSM, for any reason, bidder is required to resubmit the design/drawing/specification for approval with incorporating requirements of designated representative of RSGSM for its approval at its own cost. Even after approval of design, drawing, and specifications, Bidder will be responsible for

correctness of design and specification of the project components up to commissioning of complete project up to required standards, designated representative of RSGSM can modify or change or alter the design, specifications and works during execution or after execution and up to commissioning of complete project (if required) to achieve desired parameters. For such modifications or alteration in design, specifications and executed works etc, no additional cost shall be paid to bidder.

- xii. The MOCs (Materials of constructions) of all project/ project components shall be as per relevant national or international standards based on general industry standards are minimum for execution and operations of the project.
- xiii. Bidder shall not relived his responsibility about correctness of the project components after approval of design and drawings, and specifications can be modified by designated representative of RSGSM any time up to commissioning of complete project.
- xiv. All the equipments or machineries etc which are already installed at existing RC or to be installed by bidder at existing RC shall be the property of RSGSM. Bidder shall be handed over all equipments, machineries, software, licensee etc (to be installed/constructed under this contract) in efficient running conditions to RSGSM after completion of O&M period.
- xv. Project should be designed, installed and constructed in such a way that complete project should be fully automatic and can be controlled online through PLC-SCADA/IoT. CCTV network for surveillance, online system PLC- SCADA/IoT and management software (to be developed under this project) should be integrated with employer computers or mobiles but not limited as per direction of designated representative of RSGSM.
- xvi. The Bidder shall perform a complete Hazardous Area Classification analysis asper IS 5572 etc or latest prevailing national norms or standards etc for all facilities and components in this contract and all electrical or other powered equipment, instrumentation, or components shall fully comply with all requirements of IS 5571 or latest prevailing national norms or standards etc.
- xvii. All project components (including but not limited to equipment such as pumps, Mass flow meters, radar type level transmitter, Temperature detector, skid, density meter, PH and TDS analyzer, etc.) Shall be provided with appropriate isolation devices such as valves, gates, nuts, bolts, gaskets, reducers/ expanders/ extension of mounting nozzles (if required), mounting accessories etc. shall be in scope of bidder. or other devices etc in order to allow isolation, cleaning, calibration, servicing, and maintenance etc of such components. Bypasses shall be provided around all flow meters and other in-line instrumentations to be installed as per direction of designated representative of RSGSM, in such that the instrument can be isolated and removed for calibration and maintenance without interrupting the flow and RC operation.
- xviii. Representative of RSGSM or bidder representative shall undertake joint site visit for study, collection of data, understand of the existing process and design, drawing with P&ID Diagrams etc. to ensure possession of all sites immediately after issuing Letter of acceptance (LOA)/ Purchase order.
- xix. Any data, circular and information's, received by the Bidder from the departmentor any other source etc, shall not relieve the Bidder from his responsibility for the design, execution and commissioning of project components.
- xx. All works pertaining to unforeseeable /not mentioned condition shall be executed by the bidder at his own cost except for those for which payment is allowed in any other clause.
- xxi. The site should be cleaned of all the surplus material and to leave a clean surface at the end of work. The bidder will be fully responsible for safety stability of the all project

(Rajasthan State Ganganagar Sugar Mills Limited) components.

- xxii. In general, the minimum machinery, equipment and manpower shall be deployed by the bidder during the entire execution, DLP and O&M period so as to ensure efficient O&M and early redressal of RC grievances.
- xxiii. The sites shall be jointly visited by the RSGSM designated representative and the bidder for this contract.
- xxiv. Master control room shall be constructed & equipped at each RC including PLC SCADA/ IoT system, computer server and computer system with printer etc (required for complete project automation) as per direction of designated representative of RSGSM.
- xxv. All required equipments to be installed at each RC for effective monitoring and effective management of the project components based on the PLC/DCS based SCADA/IoT data analysis and management to achieve desired performance parameters at single point (main control room) control and analysis of all project components.
- xxvi. Bidder will provide continuous on-the-job trainings that will start from the day the bidder gets mobilized, and other capacity building programs by the bidder as important regular activities for staff of the RSGSM as per direction of designated representative of RSGSM.
- xxvii. All the instruments used in project are NABL calibrated and Mass flow meter and the instruments used in billing must be certified from metrological department of Government of India.
- xxviii. The accuracy, precession and performance parameters of all instruments to be installed must meet as per specifications given with tender document.
- xxix. During O & M, all the instruments used in custody transfer must be calibrated as per requirement.
- xxx. All type of civil, Mechanical and Electrical work which includes cutting, fitting, fixing, welding, digging, repairing etc. needed for installation of instruments and commissioning of project shall be executed as per direction of designated representative of RSGSM.
- xxxi. All preparatory work, including required survey, installation/erection, testing and commissioning of Electrical, Instrumentation and automation system, etc., complete on turnkey basis, commissioning and operation & maintenance of project components meeting tender document conditions for complete project and facilities, including future up-gradation.
- xxxii. All the designs, drawings and specifications are required to be approved from by the Representative of RSGSM.
- xxxiii. Detailed design and drawings of all electrical and instrumentation systems and all other equipment etc based on the approved design, process, layout etc shall be executed
- xxxiv. Preparation and submission of "as-built drawings" and "Operation and Maintenance Manual" with complete details of instruments, contact no, operation and maintenance logs, guarantee/warrantee, calibration method & frequency etc for the project components to be created under this contract;
- xxxv. Trial runs, testing, commissioning and conducting of performance guarantee tests of complete project components.
- xxxvi. Training program shall be arranged by bidder for Procuring Entity's designated personnel for operation and maintenance of project components and its facilities when ever required for all project components.
- xxxvii. For effective online monitoring of all RCs, The project components shall be connected and integrated through the PLC-SCADA/IoT system and management software and should be integrated with designed representative of RSGSM computer system.

- xxxviii. Bidder shall provide, Install and monitor CCTV system as per mentioned specifications with 30 days data backup at all RC locations.
- xxxix. All project components shall constructed/installed/fixed and commissioned as specifications mentioned in this tender document.
 - xI. All project components to be created under this contract shall be designed in such a way that complete unit/unit components shall be automatic and can be controlled and monitored by PLC/DCS based SCADA/IoT and management software (to developed under this contract)
 - xli. All project components (including but not limited to equipment such as pumps, Mass flow meters, Level controllers, Temperature detector, Density Meters etc.) Which shall be supplied, installed and commissioned under this contract shall fulfill hazardous prevailing national/ international norms as per satisfaction of designated representative of RSGSM.
 - xlii. The bidder shall fully responsible to arrange all safety measures required during execution and O&M of all project components. Bidder shall bound to provide all types of safety guidelines, standards and submit the safety plan/management to be followed during execution and O&M of all project components as per standards after signing of agreement before the start of works as per satisfaction of designated representative of RSGSM. However in case any accident/damages of existing infrastructures etc occurs at site shall be treated the negligence of bidder and complete responsibility of such accident/damages of existing infrastructures shall be of only bidder, all type of compensation/ repair expenses, penalty, legal actions, administrative actions, cash compensation etc shall be borne by the bidder, no additional/extra payment shall be made for the same. Spirit is highly inflammable product. Fabrication work like welding & cutting can catch fire so bidder will manage safety, security and other provisions of spirit, instruments and manpower etc.
 - xliii. In general, the minimum machinery, equipment and manpower shall be deployed by the bidder during the defect liability period as well as during the entire O&M period so as to ensure efficient O&M and early redressal of RSGSM grievances.
 - xliv. Bidder will perform measurement and calibration of all installed instruments (mass flow meter, radar type level controllers etc.) as per requirement and guidelines of instrument manufacturer/ RSGSM during DLP and O&M Period.
 - xlv. For installation of instrument on the existing lines and replace or required additional pipes shall be provided by the bidder at his own cost. RSGSM will not pay any additional cost, however all type of special fittings etc. for installation and fixing of instrument shall be in the scope of bidder.
 - xlvi. All fittings, hardware etc. which will be required for proper installation and fixing of instrument as per relevant standards, shall be as specified specifications.
- xlvii. Operation and functionality of all proposed components created under this contract shall be of the responsibility of bidder, however in case of any damage/ theft / mishandling of instruments bidder will not be responsible until the evidence has been identified by CCTV recording provided by bidder. 24X7 recording of CCTV shall be responsibility of the bidder.
- xlviii. After signing of agreement and before start the work bidder has to submit the complete P&ID of existing infrastructures of all RC, proposed P&ID with incorporating of project components to be executed (in AutoCAD format) in this project, safety plan/management, complete methodology starting from preparation of design/drawings, procurement, installation, calibration and operation etc procedures, as per prevailing standards/norms for installation/fixing/execution of project components as per satisfaction of designated representative of RSGSM.

- xlix. The scope of work for installation of instrument on the existing lines and replace or required additional SS 304 pipes shall be provided by the bidder at his own cost. However all type of special fittings etc. for installation and fixing of instrument shall be in the scope of bidder. If accuracy is effected due to existing pipeline, the bidder is liable to replace with SS 304 pipeline with same size. RSGSM will not pay any additional cost.
- L. During the Contract Period modification and new process required in PLC/DCS based SCADA/IoT software, shall be developed and implement by the bidder without any additional cost.
- Li. Production of RML & some brand of CL essence and color is also used in blending process. Bidder shall ensure the required machinery or hardware/ software for injecting the above items without manual intervention. Accuracy shall be maintained as desired.
- Lii. During the entire contract period (Part-A+B) if any installed instruments are required to relocate within premises, bidder shall relocate, configure the same instruments in working position, without any additional cost..
- Liii. As per mentioned work, if any additional hardware, software, machinery, civil work, electric work, are to be required to complete the project, bidder will have to provide the same. The mentioned items are tentative not actual. Project should be completed in all respect, because project is on TURNKEY basis.
- 2.0 The instrumentation and control schemes for the project components created under this contract shall be executed as listed below, however the list given below is not exhaustive but indicative of the level of instrumentation / automation required for successful operating and maintaining the plant. The minimum level of automation shall be ensured such that the quantity and quality parameters are not deteriorated due to lack of maintenance/calibration and operator attention in plant. Prescribed process shall be fully automatic, without manual intervention:
 - i. Flow, Level sensing, transmitting, indicating, alarm & annunciation of levels in tanks and flow channels as well as interlock and control function with associated equipment.
 - ii. Fully automatic operation, interlock, monitoring, logging, printing, event as well as report generation etc., through PLC/DCS based PC and printer along with associated hardware and software's.
 - iii. Alarm & annunciation system to annunciate the plant equipment malfunction and tripping on fault as well as any other abnormality sensing.
 - iv. Manual override facilities shall be provided at all places where PLC/DCS controls the operations.
 - v. Monitor the level in storage, blending and day holding tanks.
 - vi. Display the level and flow in storage, blending and day holding tanks and transfer line in the Central Monitoring station.
 - vii. The proposed project components created under this contract shall be fully automatic with provision of PLC/DCS based SCADA/ IoT, on-line monitoring and controlling of parameters mentioned in this section. Also monitor and control the variety wise, batch management of the liquor (CL/RML/RHL) through SCADA/IoT without manual intervention.
 - viii. Scope for installation of Software/ application overall / integrated management of proposed project created under this contract.
 - ix. Online/ Real Time continuous monitoring system as per updated Excise/RSGSM guidelines.
 - x. Hardware ,software and infrastructure required for installation of software/application
 - xi. Application should be integrated with PLC/DCS SCADA to monitor all plant equipment up todesired parameters.

- xii. PLC/DCS based SCADA/IoT system should be designed in such a way that, to collect, control and monitor the all project components.
- xiii. At each RC control room, Servers (rack servers) with hardware and software for data storage/ application deployment to be installed. These units of hardware are responsible for storage, analysis and transmission of data. This also includes Racks, Cables, Networking, Earthing, Switches, Power backup (UPS), storage, security system, Cooling system, data backup etc.
- xiv. The required Hardware and software for Internet Connectivity infrastructure, Setup wifi and wired network in individual RC/unit Campus etc. for real time data transfer from Individual RC/ Unit server to excise department central server.
- xv. At each RC, Computer system with Windows operating system, MS-office, Antivirus and other required software and printer scanner etc to be installed as per latest specification/ specifications given with this tender document.
- xvi. The scope of bidder also includes setup of Data backup, security and storage mechanism for plant data and CCTV Recordings under this project etc.
- xvii. Any Civil Construction Work (Shed, platform etc.), Electrical work, if needed for installing the instruments/ hardware/ software etc. under this project will be done the bidder.
- xviii. Standard earthing, Cable lying for installing & fixing the hardware and software will be done the bidder.
- xix. Fire fighting system for the Control room, Storage room, PLC/DCS based SCADA/IoT automation instruments are in bidder's scope.
- xx. Laying/ Jointing/ Connectors or whatever required for networking from main network switch to all points required for SCADA/IoT instruments, control room is in bidders scope.
- xxi. UPS power supply back up to minimum four hour (for server room and instruments installed under this project) will also be arranged by the bidder.
- xxii. Safety covers shall be provided by the bidder for all kind of instruments, which are to be installed for SCADA/IoT at R.C.
- xxiii. Computer and computer related Accessories (one redundant server and two work station with printer scanner) shall be provided by bidder.
- xxiv. To communicate the signal/ data, the purchase and timely recharge of Dongle/ SIM during DLP and complete O&M period at each RC under the bidder's scope.
- xxv. SCADA software should having minimum capabilities and features but not limited to the following activities:-
 - 1) After installation and integration of industrial instruments the entire live plant should be controlled and monitored by SCADA system.
 - 2) Accumulation of live data on plant level as well as centralized database for MIS Generations.
 - 3) Real time on line monitoring and exact replica diagram of the plant with the process and the instrumentation view through industrial SCADA with dashboard view.
 - 4) The reports generated at Plants according to the desired format provided by RSGSM.
 - 5) End to End Pipe line, storage, instruments view of process.
 - 6) Bidder shall provide time to time reports asked by RSGSM throughout the contract period. All hardware, software, licenses & manpower to implement the SCADA software is in Bidder's scope. In order to enable surveillance at the Real time on line monitoring and exact replica diagram of the plant with the process and the instrumentation view through industrial SCADA with dashboard view, the BIDDER will provide all necessary screens etc.

The bidder should provide SCADA software support throughout contract period.

- **Scope of work for RSGSM :** Following works/activities are to maintained/repaired/managed by the RSGSM:
 - Fire fighting system in complete RC for filling station, VAT Hall & other premises of RC.
 - Operation and maintenance of RO water system,
 - Operation and maintenance of bottle filling station of RC,
 - Process operation of the RC,
 - Calibration of Vats as per their requirement,
 - Continuous internet connectivity.
 - Continuous Electricity supply (Transformer, generator etc)
 - General Maintenance and supervision of RC,
 - Production Process of RC,
 - Maintenance of VATS & day holding tanks and other fixtures, replacement of VAT's & day holding tanks (if required).
 - If there is need of extension (VATS, day holding tanks, pipe network, filling unit etc.) of RC, additional cost will be paid by RSGSM. Maintenance / cleaning of all VATS, day holding tanks, filling station etc.

• Following items, quantities with specification and all terms and conditions/clauses etc of this tender/contract shall executed under this project/contract

TABLE:- SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

Package wise					
S. No.	Description		Unit	Quantity	
1.	Supply, installation, testing Metering Skid, including Miconcentration), Air eliminal Controller, Digital controller, Digital controller, preinstalled Microprocesson transmitter with dual tube associated components as at Inlet of Bottling units. All per compatibility of 2" (Supplied, installed, tested specification and other terrifor following locations.				
	Package 1	Jaipur	Nos.	2	
		Bhilwara	Nos.	1	
		Hanumangarh	Nos.	1	
		Alwar	Nos.	2	
	Package 2	Kota	Nos.	2	
		Jodhpur	Nos.	1	
		Udaipur	Nos.	1	
		Ajmer	Nos.	1	
2.	Supply, installation, testing and commissioning of complete Metering Skid, including Mass Flow Meter (for Flow, Density and concentration), Air eliminator, Pressure transmitter, Temperature Controller, Digital control valve. Metering skid shall have preinstalled Microprocessor based Coriolis mass flow and density transmitter with dual tube design, valves, Air Eliminator and associated components as single unit structure for ready to install at before day holding tank of Bottling units. All skid components shall be installed as per compatibility of 2" (inch) size. All components shall be Supplied, installed, tested and commissioned as per scope, specification and other terms & conditions of this bid document etc for following locations.				
	Package 1	Jaipur	Nos.	5	
		Bhilwara	Nos.	1	
		Hanumangarh	Nos.	2	
		Alwar	Nos.	2	
	Package 2	Kota	Nos.	1	
		Jodhpur	Nos.	2	

Name of Project:- Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

Package wise					
S. No.	Description		Unit	Quantity	
		Udaipur	Nos.	2	
		Ajmer	Nos.	1	
3.	Operated On/Off Control Pneumatic line along with a of inlet and outlet of vats an SCADA compatibility comp jointing material) includir commissioning as per Te shall be Supplied, installed	g and commissioning of Pneumatic Valve with required Air Compressor, air manifold, fittings etc for auto control d etc as per approved P&ID suitable for olete (including all types of fittings & ag all material, labor, testing and echnical Specification. All components ed, tested and commissioned as per other terms & conditions of this bid occations.			
		Jaipur			
		2 Inch(Pneumatic type)	Nos.	75	
		1.5 Inch(Pneumatic type)	Nos.	15	
		1.0 Inch(Pneumatic type)	Nos.	3	
		Bhilwara			
		2 Inch(Pneumatic type)	Nos.	28	
		1.5 Inch(Pneumatic type)	Nos.	7	
		1.0 Inch(Pneumatic type)	Nos.	1	
		0.5 Inch(Pneumatic type)	Nos.	0	
		Hanumangarh			
		2 Inch(Pneumatic type)	Nos.	31	
	Package 1	1.5 Inch(Pneumatic type)	Nos.	1	
		1.0 Inch(Pneumatic type)	Nos.	3	
		0.5 Inch(Pneumatic type)	Nos.	0	
		Alwar			
		2 Inch(Pneumatic type)	Nos.	29	
		1.5 Inch(Pneumatic type)	Nos.	0	
		1.0 Inch(Pneumatic type)	Nos.	3	
		0.5 Inch(Pneumatic type)	Nos.	0	
		Kota			
		2 Inch(Pneumatic type)	Nos.	43	

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

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Par	kane	wise
ıav	nayc	. W13C

S. No.	Description		Unit	Quantity
		1.5 Inch(Pneumatic type)	Nos.	0
		1.0 Inch(Pneumatic type)	Nos.	0
		0.5 Inch(Pneumatic type)	Nos.	0
	J	lodhpur		
	Package 2	2 Inch(Pneumatic type)	Nos.	55
		1.5 Inch(Pneumatic type)	Nos.	10
		1.0 Inch(Pneumatic type)	Nos.	0
		0.5 Inch(Pneumatic type)	Nos.	0
	Ī	Jdaipur		
		2 Inch(Pneumatic type)	Nos.	40
		1.5 Inch(Pneumatic type)	Nos.	4
		1.0 Inch(Pneumatic type)	Nos.	2
		0.5 Inch(Pneumatic type)	Nos.	0
	Ā	Ajmer		
		2 Inch(Pneumatic type)	Nos.	13
		1.5 Inch(Pneumatic type)	Nos.	13
		1.0 Inch(Pneumatic type)	Nos.	0
		0.5 Inch(Pneumatic type)	Nos.	0
4.	Transmitter including all typtank /sump of 12 mtr heigh installed, tested and commis	and commissioning of Radar type Level bes of fittings, flanges etc suitable for nt. All components shall be Supplied, ssioned as per scope, specification and of this bid document etc for following		
	Project 1	Jaipur	Nos.	31
		Bhilwara	Nos.	12
		Hanumangarh	Nos.	11
		Alwar	Nos.	13
	Project 2	Kota	Nos.	19
		Jodhpur	Nos.	22
		Udaipur	Nos.	18
		Ajmer	Nos.	10

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

Package wise				
S. No.	Description		Unit	Quantity
5.	Meter (Flow, Density and fittings, flanges etc for me and etc as per approved P installed, tested and comm	g and commissioning of Mass Flow d concentration) including all types of easurement of ENA/RS at transfer line &ID. All components shall be Supplied, issioned as per scope, specification and of this bid document etc for following		
		Jaipur		
		1.0 Inch	Nos.	4
	Project 1	Bhilwara		
	1 Toject 1	1.0 Inch	Nos.	1
ı		Hanumangarh		
ı		1.0 Inch	Nos.	1
		Alwar		
		1.0 Inch	Nos.	1
	Project 2	Kota		
		1.0 Inch	Nos.	2
		Jodhpur		
		1.0 Inch	Nos.	1
		Udaipur		
		1.0 Inch	Nos.	1
		Ajmer		
		1.0 Inch	Nos.	1
6. Flow Meter for measuren approved P&ID. including a existing pipeline required for including cutting ,welding, complete in all respect components shall be Supplete.		g and commissioning of Vortex Type nent of DM /RO water and etc as per all materials and making connection with or installation of Vortex TypeFlow Meter fixing etc. in the existing pipe line etc. as per technical specification. All lied, installed, tested and commissioned on and other terms & conditions of this ing locations.		
		Jaipur		
		1.5 Inch	Nos.	1
		Bhilwara		
	Project 1	1.5 Inch	Nos.	1
	-,	Hanumangarh		

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

acka	ge wise			
. No.	Description		Unit	Quantity
		1.5 Inch	Nos.	1
		Alwar		
		1.5 Inch	Nos.	1
		Kota		
		1.5 Inch	Nos.	1
		Jodhpur		
	Project 2	1.5 Inch	Nos.	1
		Udaipur		
		1.5 Inch	Nos.	1
		Ajmer		
		1.5 Inch	Nos.	1
all respect with all ad installed, tested and	all respect with all accessor installed, tested and commit other terms & conditions of	tion in spirit/ENA/Alcohol & complete in ries. All components shall be Supplied, ssioned as per scope, specification and of this bid document etc for following		
		Jaipur	Nos.	15
		Bhilwara	Nos.	6
	Project 1	Hanumangarh	Nos.	4
		Alwar	Nos.	2
		Kota	Nos.	1
	D 1 . 0	Jodhpur	Nos.	10
	Project 2	Udaipur	Nos.	6
		Ajmer	Nos.	4
8.	transmitter Temperature so and etc as per approved P8 200'C (Head mounted) 3 wi transmitter Protection: IP spirit/ENA/Alcohol & comp All components shall b commissioned as per sco	and Commissioning of Temperature ensor at blending tank and transfer line alD, with transmitter and RTD Range 0-re PT-100 head mounted to fitted with 65 and Above for Application in lete in all respectwith all accessories. The Supplied, installed, tested and pe, specification and other terms & ent etc for following locations.		
	Project 1	Jaipur	Nos.	20

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

Package wise					
S. No.	Description		Unit	Quantity	
		Bhilwara	Nos.	7	
			Nos.	5	
		Hanumangarh Alwar	Nos.	3	
		Kota	Nos.	7	
	Project 2	Jodhpur	Nos.	11	
	-	Udaipur	Nos.	7	
		Ajmer	Nos.	5	
9. P&ID, including all materials a required etc. complete in all Supplied, installed, tested a		ng and commissioning of TDS water line and etc as per approved and accessories for existing pipeline all respect. All components shall be and commissioned as per scope, as & conditions of this biddocument etc			
ı	Project 1	Jaipur	Nos.	1	
		Bhilwara	Nos.	1	
		Hanumangarh	Nos.	1	
		Alwar	Nos.	1	
	Project 2	Kota	Nos.	1	
		Jodhpur	Nos.	1	
		Udaipur	Nos.	1	
		Ajmer	Nos.	1	
10.	Supply, Installation, Testing and Commissioning of PH ANALYSER in water line and etc as per approved P&ID, for spirit/ENA/Alcohol Application: Transmitter: Range: 0-14 pH, able to transmit digital signal to transmitter, calibration data can be transferred to Transmitter as per technical specification & complete in all respect with all accessories. All components shall be Supplied, installed, tested and commissioned as per scope, specification and other terms & conditions of this bid document etc for following locations.				
	Project 1	Jaipur	Nos.	1	
		Bhilwara	Nos.	1	
		Hanumangarh	Nos.	1	
		Alwar	Nos.	1	
	Project 2	Kota	Nos.	1	
		Jodhpur	Nos.	1	
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TABLE:-

SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

Раска	ge wise		Γ	T
S. No.	Description		Unit	Quantity
		Udaipur	Nos.	1
		Ajmer	Nos.	1
11.	in transfer line and etc as per spirit/ENA/Alcohol. All compor tested and commissioned as	d Commissioning of air eliminator approved P&ID, for Application in nents shall be Supplied, installed, per scope, specification and other ocument etc for following locations.		
		Jaipur	Nos.	4
		Bhilwara	Nos.	1
	Project 1	Hanumangarh	Nos.	1
		Alwar	Nos.	1
		Kota	Nos.	2
		Jodhpur	Nos.	1
	Project 2	Udaipur	Nos.	1
		Ajmer	Nos.	1
12.	TRANSMITTER in transfer line components shall be Supplied,	and Commissioning of PRESSURE and etc as per approved P&ID, All installed, tested and commissioned other terms & conditions of this bid tions.		
		Jaipur	Nos.	4
		Bhilwara	Nos.	1
	Project 1	Hanumangarh	Nos.	1
		Alwar	Nos.	1
		Kota	Nos.	2
		Jodhpur	Nos.	1
	Project 2	Udaipur	Nos.	1
		Ajmer	Nos.	1
13.	Supply, Installation, Testing and Commissioning with necessary packing, receiving, unloading, shifting, storing of Horizontal Centrifugal Split Casting pumps with motor before inlet skid and etc as per approved P&ID, casing and casing ring, impeller, Shaft and shaft sleeve, coupling guard, common base plate, foundation bolts, flexible pipe with all fittings and flanges required to unloading of ENA/RS etc. for application in spirit/ENA/Alcoholocomplete with all respect as per the specification. All components shall be Supplied, installed, tested and commissioned as pescope, specification and other terms & conditions of this bid document etc for following locations.			

TABLE:-

SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

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S. No.	Description		Unit	Quantity
		Jaipur		1 1 1 1 1
		5 HP	Nos.	1
	Project 1	Bhilwara		
		5 HP	Nos.	1
		Hanumangarh		
		5 HP	Nos.	1
		Alwar		
		5 HP	Nos.	1
		Kota		
	Drainet 2	5 HP	Nos.	1
	Project 2	Jodhpur		
		5 HP	Nos.	1
		Udaipur		
		5 HP	Nos.	1
		Ajmer		
		5 HP	Nos.	1
14.	PLC panel of fabricated out of complete with Operator Staprogramming software for PLC required accessories not limite Logic Controller (PLC) with Dua & Power supply module for IO Back up Interface/Expans (Backplane) Required slots for leper requirement and etc as per including, Core i5 processor, 8 DVD RW Drive, Antivirus, RS-20 Ports, 1 Parallel Port, 4 nos Keyboard, optical mouse, professional ver., etc. – 02 nos. software for HMI -OWS – printer– 1 nos (related consuma 3kVA UPS, input as 1Phase 22 phase with min 4 Hrs. back up N split Air conditioner for PLC SC unit(IDU), Outdoor unit (ODU refrigerant piping with insulat required (IDU to ODU), copper	O andProcessor, DI, DO, AI, AO as approved P&ID, Operator Station GB DDR-3 RAM, 512 GB SSD, 232/485 USB Port, 2x Ethernet Cards, 32" monitor, Latest windows Programming and troubleshooting I lot, Color Printer A4, LaserJet ables are in bidders scope), online 30 V, 50 Hz and o/p shall be single li+Cd battery bank, 2TR Air Cooled ADA ROOM complete with Indoor J), surface / concealed copper ion (EP foam pipe section) as power cable as required (IDU to be for 400/230V +10% of 50 Hz 1/3		

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

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Package wise						
S. No.	Description		Unit	Quantity		
	VENTILATION & complete in All components shall	CIRCULATION, FILTERATION & all respect with all accessories. be Supplied, installed, tested and be, specification and other terms & and etc for following locations.				
		Jaipur	Nos.	1		
	Project 1	Bhilwara	Nos.	1		
		Hanumangarh	Nos.	1		
		Alwar	Nos.	1		
		Kota	Nos.	1		
		Jodhpur	Nos.	1		
	Project 2	Udaipur	Nos.	1		
		Ajmer	Nos.	1		
Supply, installation & testing of 1080p HD camera with 1/2.7-inch CMOS, Sensor Sensitivity-0.24 lx (color) 0.05 lx (mono) & mtrs Dynamic range, True day/night, Automa Video compression H.264 MP (Main Probalance, BLC, H.264 quad-streaming, detection, Privacy Mask, Motion detect Varifocal 3 to 10 mm lens, Built-in microp duplex Audio, Audio compression AAC, GL16 (live and recording), Memory card sl (pan/tilt/ rotation), ONVIF Profile S, CE, UL following locations covered under this pack shall be Supplied, installed, tested and continuous covered under the pack scope, specification and other terms & continuous covered under the pack scope, specification and other terms & continuous covered under the pack scope, specification and other terms & continuous covered under the pack scope, specification and other terms & continuous covered under the pack scope, specification and other terms & continuous covered under the pack scope, specification and other terms & continuous covered under the pack scope, specification and other terms & continuous covered under the pack scope.		15 Ix (mono) & 0 Lux in IR,IR upto 15 by/night, Automatic Electronic Shutter, MP (Main Profile); M-JPEG, White Lad-streaming, Motion/tamper/audio Motion detection, Tamper alarm, Built-in microphone, Two-way, full lession AAC, G.711, lemory card slot, 3-axis adjustment of lession Society, FCC Certified, at under this package. All components tested and commissioned as per her terms & conditions of this bid				
		Jaipur	Nos.	10		
	Droject 1	Bhilwara	Nos.	7		
	Project 1	Hanumangarh	Nos.	7		
		Alwar	Nos.	5		
		Kota	Nos.	7		
	Drainet 2	Jodhpur	Nos.	9		
	Project 2	Udaipur	Nos.	9		
		Ajmer	Nos.	8		

Name of Project:- Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

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Package wise					
S. No.	Description		Unit	Quantity	
16.	Supply Installation Testing & camera with 1/3.2-inch CMOS, (2MP), Builtin IR illuminator wi Fully configurable quad streamir Sensitivity-0.24 Ix,0.0 Ix (IR), Electronic shutter, iDNR, BLC, Four independent areas, fully duplex Audio Streaming, Variadjustment (pan/tilt/rotation), Pas, IP66, IK08, CE, FCC, UL Censhould be of same make as of clens, Camera Mounts, Power & all accessories as per technic /FCC listed. The camera, softwarmake for seamless integratio locations covered under this p Supplied, installed, tested and specification and other terms& for following locations.				
		Jaipur	Nos.	5	
	Duction 4	Bhilwara	Nos.	3	
	Project 1	Hanumangarh	Nos.	3	
		Alwar	Nos.	3	
		Kota	Nos.	3	
	Project 2	Jodhpur	Nos.	3	
	Project 2	Udaipur	Nos.	3	
		Ajmer	Nos.	3	
17.	Supply, Installation, Testing & Commissioning of ANPR Camera (1/1.8 inch progressive scan CCD/CMOS or better image sensor, High performance embedded processor, video resolution Minimum 2688X1520 or better, lens length 10-50mm or better, frame rate Min 25 fps, video compression H.265/H.264/MJPEG, shutter speed 1/25-1/100000, minimum illumination color 0.01 Lux or better, WDR 90 Db or better, support vehicle type and vehicle color recognition, License plate recognition, Vehicle detection trigger, capture number and letters from vehicle number plate, IP 67 protection)				

Name of Project:- Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

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S. No.	Description		Unit	Quantity
		Jaipur	Nos.	1
	Project 1	Bhilwara	Nos.	1
		Hanumangarh	Nos.	1
		Alwar	Nos.	1
		Kota	Nos.	1
		Jodhpur	Nos.	1
	Project 2	Udaipur	Nos.	1
		Ajmer	Nos.	1
18.	latest Generation processo DVDRW/ keyboard/optical Minimum 6 USB ports. Will latest and compatible Pro UPS, input as 1Phase 230 with min 4 Hrs. back up Nivideo surveillance all c simultaneously in single P H.264, MPEG-4, MJPEG, megapixel (1M, 2M, 3M), Powerful E-map based mor area zoom, Support for variand time based search: normal pla playback, step playback, Notification in case of eborder of video window: d Back up capability: manufulti-level user access an multi-language user intercameras for quick and management (configuration Nucleaus is the software management of all devices intuitive interface for adm Scale Solution. The Softw with the Vicon Net Nucleau all distributed devices	g & Commissioning of NVR, Intel i7 r 3Ghz, 4GB RAM with 2TB harddisk, mouse/LAN card/19" LED monitor. th pre-loaded licensed Windows 10 or fessional software PC & online 1KVA V, 50 Hz and o/p shall be single phase +Cd battery bank, Monitoring software hannels real- time live monitoring C, Support for various video format: Support for various video resolution: Full HD, 4CIF, Half D1, VGA, CIF, intoring, Remote PTZ control and power ous search and playback options: date event (alarm, motion, intelligent video) yback, backward playback, fast/slow event occurring: highlighting in the isplay event log message in real time, all back up: AVI, REC1, SEC format, dauthority management, Support for face, Automatic search of network easy configuration, Easy device in, firmware upgrade), The Viconnet Component that enables centralized within a surveillance system. It is an inistrators to manage an enterpriseare enables a distributed architecture so Acting as the central server that links into a common ViconNet Flat Screen HD LED TV with remote		

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

Package w	ISE

o. Description		Unit	Quantity
Fast Ethernet POE (provision for Coppe Software. The LAN be including Network A service (QoS), availate converged application Multimode Fiber Gig Cable as per latest an MS/PVC Conduits/C Information outlets an identification with necessing, 15U Wall m complete in all resp covered under this installed, tested and completed.	nernet POE Switches providing 8/16 x 10/100/100 ports- 370W or better and 4dual purpose upliner / Fiber Giga connectivity) with LAN base ased S/W supports enhanced integrated securit Admission Control (NAC), advanced quality ability and scalable management to enable nears, 1000 Base-SX, SFP, MMF, LC connected a module,4 pair, 100 ohm, 24 AWG UTPCat mendments of TIA /EIA 568 B.2-1 specifications cable tray including making connections and Patch Panels with ferruling at both ends for essary tools for punching, stripping, crimping are counted Communication rack with glass doors been with all accessories at following location package. All components shall be Supplied ommissioned as per scope, specification and other this bid document etc for following locations.	nk ed y, of w or, 6 in to or nd & as d,	
Project 1	Jaipur	Nos.	1
	Bhilwara	Nos.	1
	Hanumangarh	Nos.	1
	Alwar	Nos.	1
Project 2	Kota	Nos.	1
	Jodhpur	Nos.	1
	Udaipur	Nos.	1
	Ajmer	Nos.	1
NVR Software for CCTV			
Project 1	Jaipur	Nos.	1
	Bhilwara	Nos.	1
	Hanumangarh	Nos.	1
	Alwar	Nos.	1
Project 2	Kota	Nos.	1
	Jodhpur	Nos.	1
	Udaipur	Nos.	1
UTP Cat 6 Cable	Ajmer	Nos.	1
OTF Cat o Capie			
	Jaipur	Mtr.	341
Project 1	Bhilwara	Mtr.	160
	Hanumangarh	Mtr.	210

Alwar Mtr. 200

TABLE:- SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

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Package	wise

S. No.	Description		Unit	Quantity
		Kota	Mtr.	240
	D	Jodhpur	Mtr.	310
	Project 2	Udaipur	Mtr.	220
		Ajmer	Mtr.	180
19.	armored type FRLS cables for 1.5 sqmm, 3Px1.5 sqmm, 10F sqmm sizes along with glands for existing instrument/require technical specification and terminations & glands. All co	ennection, testing & commissioning of or instruments of 4C x 1.5 sqmm, 1P x Px1.0 sqmm, 3C x 1.5 sqmm, 16C x 1.5 including all materials and accessories ement complete in all respect as per as per approved SLD including mponents shall be Supplied, installed, s per scope, specification and other document etc for all locations.		
		Jaipur		
		4C x 1.5 sqmm	Mtr.	565
		1P x 1.5 sqmm	Mtr.	260
		3P x 1.5 sqmm	Mtr.	470
		10P x 1.0 sqmm	Mtr.	700
		3C x 1.5 sqmm	Mtr.	700
		16C x 1.5 sqmm	Mtr.	585
		Bhilwara		
		4C x 1.5 sqmm	Mtr.	240
		1P x 1.5 sqmm	Mtr.	100
		3P x 1.5 sqmm	Mtr.	200
		10P x 1.0 sqmm	Mtr.	240
		3C x 1.5 sqmm	Mtr.	260
		16C x 1.5 sqmm	Mtr.	260
	Project 1	Hanumangarh		
		4C x 1.5 sqmm	Mtr.	280
		1P x 1.5 sqmm	Mtr.	400
		3P x 1.5 sqmm	Mtr.	240
		10P x 1.0 sqmm	Mtr.	310
		3C x 1.5 sqmm	Mtr.	310
		16C x 1.5 sqmm	Mtr.	250
		Alwar		
		4C x 1.5 sqmm	Mtr.	210
		1P x 1.5 sqmm	Mtr.	235
		3P x 1.5 sqmm	Mtr.	150
		10P x 1.0 sqmm	Mtr.	220
		3C x 1.5 sqmm	Mtr.	220

16C x 1.5 sqmm Mtr. 220

TABLE:- SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

. No.	Description		Unit	Quantity
		Kota		
		4C x 1.5 sqmm	Mtr.	300
		1P x 1.5 sqmm	Mtr.	240
		3P x 1.5 sqmm	Mtr.	270
		10P x 1.0 sqmm	Mtr.	350
		3C x 1.5 sqmm	Mtr.	350
		16C x 1.5 sqmm	Mtr.	320
		Jodhpur		
		4C x 1.5 sqmm	Mtr.	430
		1P x 1.5 sqmm	Mtr.	460
		3P x 1.5 sqmm	Mtr.	330
		10P x 1.0 sqmm	Mtr.	530
		3C x 1.5 sqmm	Mtr.	535
		16C x 1.5 sqmm	Mtr.	410
	Project 2	Udaipur		
		4C x 1.5 sqmm	Mtr.	370
		1P x 1.5 sqmm	Mtr.	440
		3P x 1.5 sqmm	Mtr.	280
		10P x 1.0 sqmm	Mtr.	380
		3C x 1.5 sqmm	Mtr.	400
		16C x 1.5 sqmm	Mtr.	330
		Ajmer		
		4C x 1.5 sqmm	Mtr.	270
		1P x 1.5 sqmm	Mtr.	120
		3P x 1.5 sqmm	Mtr.	270
		10P x 1.0 sqmm	Mtr.	330
		3C x 1.5 sqmm	Mtr.	330
		16C x 1.5 sqmm	Mtr.	280
20.	laying, aligning, fixing in po- marked SS 304 pipes of Dia Inch for spirit/ENA/Alcoho accessories like Bend, Te- including all material, laborate Technical Specifications accessories. All components	ng and Commissioning with lowering, sition and jointing at all level/ depths ISI a 2.5 Inch, 2 Inch, 1.5 Inch, 1.0 Inch, 0.5 ol application in complete with all ee, Reducer, Stub end, End cap etcor, testing and commissioning as per & complete in all respect with all s shall be Supplied, installed, tested and ope, specification and other terms &		
		Jaipur	1	
		2.5 Inch	Mtr.	100
	Project 1	2 Inch	Mtr.	150

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

S. No.	Description		Unit	Quantity
		1.5 Inch	Mtr.	100
		1 Inch	Mtr.	100
		0.5 Inch	Mtr.	100
		Bhilwara		
		2.5 Inch	Mtr.	85
		2 Inch	Mtr.	70
		1.5 Inch	Mtr.	70
		1 Inch	Mtr.	40
		0.5 Inch	Mtr.	70
		Hanumangarh		
		2.5 Inch	Mtr.	70
		2 Inch	Mtr.	150
		1.5 Inch	Mtr.	70
		1 Inch	Mtr.	70
		0.5 Inch	Mtr.	40
		Alwar		
		2.5 Inch	Mtr.	70
		2 Inch	Mtr.	150
		1.5 Inch	Mtr.	70
		1 Inch	Mtr.	70
		0.5 Inch	Mtr.	40
		Kota		
		2.5 Inch	Mtr.	70
		2 Inch	Mtr.	150
	Project 2	1.5 Inch	Mtr.	70
	1 Toject Z	1 Inch	Mtr.	70
		0.5 Inch	Mtr.	40
		Jodhpur		
		2.5 Inch	Mtr.	70
		2 Inch	Mtr.	130
		1.5 Inch	Mtr.	70
		1 Inch	Mtr.	70
		0.5 Inch	Mtr.	40
		Udaipur		
		2.5 Inch	Mtr.	70
		2 Inch	Mtr.	130
		1.5 Inch	Mtr.	70
		1 Inch	Mtr.	70
		0.5 Inch	Mtr.	40
		Ajmer		
		2.5 Inch	Mtr.	70
		2 Inch	Mtr.	100
		1.5 Inch	Mtr.	70

1 Inch Mtr. 70

TABLE:- SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

S. No.	Description		Unit	Quantity
		0.5 Inch	Mtr.	70
21.	work at all locations/ RCs unde trays with cover Thickness sha 300MM) as required including hees, cross members and oth Earth plate of size 600mm x 6 mtr for for LV & Electrical systems. Three Phase Distribution board MCB, Wires, Cables & comple All components shall be	and Commissioning of All electrical r this package like GI perforated cable II be 2.5mm of sizes (50MM, 150MM, norizontal and vertical bends, reducers her accessories as required, Copper 00mm x 3.0mm by embodying 3 to 4 em including wire & strip as required, d with phase wise RCBO & outgoing ete in all respect with all accessories. Supplied, installed, tested and ete, specification and other terms & etc for all locations.		
		Jaipur		
		50mm	Mtr.	600
	Project 1	150mm	Mtr.	540
		300mm	Mtr.	280
		Bhilwara		
		50mm	Mtr.	320
		150mm	Mtr.	200
		300mm	Mtr.	170
		Hanumangarh		
		50mm	Mtr.	280
		150mm	Mtr.	200
		300mm	Mtr.	140
		Alwar		
		50mm	Mtr.	320
		150mm	Mtr.	200
		300mm	Mtr.	170
		Kota		
		50mm	Mtr.	450
	Project 2	150mm	Mtr.	250
		300mm	Mtr.	190
		Jodhpur		
		50mm	Mtr.	520
		150mm	Mtr.	280
		300mm	Mtr.	210
		Udaipur		
		50mm	Mtr.	360
		150mm	Mtr.	210

300mm Mtr. 150

TABLE:- SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

6. No.	Description		Unit	Quantity
		Ajmer		
		50mm	Mtr.	400
		150mm	Mtr.	180
		300mm	Mtr.	170
	Earthing Plate with earth Wi	ire/ Strip in horizontal or vertical run		
		Jaipur		
		600 x 600 mm x 3 mm	Nos.	2
		8 SWG Copper wire	Mtr.	220
		25mm x 25mm copper strip	Mtr.	110
	Project 1	Bhilwara		
		600 x 600 mm x 3 mm	Nos.	2
		8 SWG Copper wire	Mtr.	250
		25mm x 25mm copper strip	Mtr.	130
		Hanumangarh		
		600 x 600 mm x 3 mm	Nos.	2
		8 SWG Copper wire	Mtr.	250
		25mm x 25mm copper strip	Mtr.	120
		Alwar		
		600 x 600 mm x 3 mm	Nos.	2
		8 SWG Copper wire	Mtr.	250
		25mm x 25mm copper strip	Mtr.	130
		Kota		
		600 x 600 mm x 3 mm	Nos.	2
		8 SWG Copper wire	Mtr.	250
		25mm x 25mm copper strip	Mtr.	120
	Project 2	Jodhpur		
	Project 2	600 x 600 mm x 3 mm	Nos.	2
		8 SWG Copper wire	Mtr.	260
		25mm x 25mm copper strip	Mtr.	130
		Udaipur		
		600 x 600 mm x 3 mm	Nos.	2
		8 SWG Copper wire	Mtr.	280
		25mm x 25mm copper strip	Mtr.	130
		Ajmer		
		600 x 600 mm x 3 mm	Nos.	2
		8 SWG Copper wire	Mtr.	220

25mm x 25mm copper strip Mtr. 100

TABLE:- SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

S. No.	Description		Unit	Quantity
	P&F recessed/ Surface mounting heavy duty Vertical type sheet steel distribution Board , P&F of RCBO with overload, short circuit and earth leakage protectio (Four pole 100 mA sensitivity), P&F 240/415 V MCB of breaking capacity not less than 10 KA			
	The state of the s	Jaipur		
		Double Door (Three Phase- 6 Way)	Nos.	1
		Four pole 100 mA sensitivity (40-63A		3
		rating)	1403.	
		Single Pole MCB (6A to 32 A Rating)	Nos.	18
		Four Pole MCB (40A to 63 A Rating)	Nos.	1
	.	Bhilwara		
	Project 1	Double Door (Three Phase- 6 Way)	Nos.	1
		,	Nos.	3
		rating)		
		Single Pole MCB (6A to 32 A Rating)	Nos.	18
		Four Pole MCB (40A to 63 A Rating)	Nos.	1
		Hanumangarh		
		Double Door (Three Phase- 6 Way)	Nos.	1
		Four pole 100 mA sensitivity (40-63A	Nos.	3
		rating)		
		Single Pole MCB (6A to 32 A Rating)	Nos.	18
		Four Pole MCB (40A to 63 A Rating)	Nos.	1
		Alwar		
		Double Door (Three Phase- 6 Way)	Nos.	1
		Four pole 100 mA sensitivity (40-63A rating)	Nos.	3
		Single Pole MCB (6A to 32 A Rating)	Nos.	18
		Four Pole MCB (40A to 63 A Rating)	Nos.	1
		Kota		
		Double Door (Three Phase- 6 Way)	Nos.	1
		Four pole 100 mA sensitivity (40-63A rating)	Nos.	3
	Project 2	Single Pole MCB (6A to 32 A Rating)	Nos.	18
		Four Pole MCB (40A to 63 A Rating)	Nos.	1
		Jodhpur		
		Double Door (Three Phase- 6 Way)	Nos.	1
		Four pole 100 mA sensitivity (40-63A rating)	Nos.	3
		Single Pole MCB (6A to 32 A Rating)	Nos.	18
		Four Pole MCB (40A to 63 A Rating)	Nos.	1
		Udaipur	1	
		Double Door (Three Phase- 6 Way)	Nos.	1
		Four pole 100 mA sensitivity (40-63A rating)	Nos.	3
		Single Pole MCB (6A to 32 A Rating)	Nos.	18
		Four Pole MCB (40A to 63 A Rating)	Nos.	1

Ajmer

TABLE:- SCOPE OF WORK

Name of Project: Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based of SCADA / IoT in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data.

Package wise

S. No.	Description	Unit	Quantity
	Double Door (Three Phase- 6 Way)	Nos.	1
	Four pole 100 mA sensitivity (40-63A rating)	Nos.	3
	Single Pole MCB (6A to 32 A Rating)	Nos.	18
	Four Pole MCB (40A to 63 A Rating)	Nos.	1
22.	Miscellaneous works at all locations/ RCs under this package to commission the project including Construction of Control Room (225Sqft), Store Room(225 Sqft), with all associated civil works, furniture work (Doors, Window, fall ceiling & Table chairs), all required associated electrical work (Curtains, Fan, Light & Exhaust etc.), all type Plumbing work for complete installation, testing and commissioning of automation work, all finishing and cleaningwork at site and development of management software required to commissioned project components as per scope, specifications and condition of contract etc. as per direction and approval of designated representative of RSGSM. All components shall be Supplied, installed, tested and commissioned as per scope, specification and other terms & conditions of this bid document etc for all locations under this package.	Lot.	1
23.	Supply, Installation, Testing and Commissioning SCADA/IoT Device/ Technology/Programming for transfer continuous real time data of quantity and strength of RS/ENA received, quantity and strength of RS/ENA in storage, Quantity and strength of final Product etc. from individual RC SCADA/IoT server to excise department central server in desired format provided by excise department. Required accessories like data logger, modem, RTU etc. shall be provided by Bidder. All components shall be Supplied, installed, tested and commissioned as per scope, specification and other terms & conditions of this bid document etc for all locations under this package.		1

Note:-

- Before quoting the rates in BoQ, It suggested to bidder to visit the each RC/unit to access the quantum of works to be executed under this package and mentioned scope of work.
- Quantity is mentioned in above table are tentative, may be increased/ decreased.
- If any required H/w, S/w, equipments etc. are not mentioned in the above table, those H/w, S/w equipments etc. shall also be the part of project and incorporated as TURNKEY basis. For this no additional payment made by RSGSM.
- Project should be completed in all respect as on TURNKEY basis project.

STANDARD SPECIFICATIONS

For items that are not covered in either of the above documents, the relevant Standards issued by the Bureau of Standards, Standard Specifications issued by the Government and good engineering practices etc shall be followed.

All specifications, norms and etc mentioned in the tender shall be considered as indicative and minimum only for designing of project components created under this contract. However design, drawing and specification can be upgraded or modified by RSGSM for project components (if required) as per prevailing updated national/international standards/practices as per mutual agreement between designated representative of RSGSM and bidder.

The scope of work includes design, equipment selection, manufacture, inspection at Bidder's works, supply, installation (including storing, unloading and transferring the material / equipment to Bidder's storage area, maintaining equipment / material in safe custody and assembling the elements of the equipment and installing at the place of work), testing and commissioning of the plant equipment/ electrical system on 'turnkey' basis.

All equipment offered shall comply with the requirements specified in the latest editions of applicable Indian/ International Standards and shall also comply with the good engineering practices.

Bidder shall design the electrical / Instrumentation system on the basis of 'Design Criteria' and to be submitted for RSGSM or their representative's approval. Bidder shall incorporate any changes/suggestions in the drawings to suit site conditions and design criteria and standard engineering practice and resubmit for approval to RSGSM or their representative.

All commissioning tests/ calibrations shall be carried out in the presence of RSGSM or their representative and approval for the same shall be obtained before commissioning and installation. All test / calibration reports shall be properly maintained by the Bidder duly approved by the statutory bodies and shall be handed over to the RSGSM after completion of the job. All instrument and accessories required for testing and commissioning of the equipment specified herein shall be provided by the Bidder at no extra cost to the RSGSM.

The General Criteria followed for the equipment and systems are as given below.

Table 1: Metering Skid

Metering Skid			
TYPE	:	Metering skid shall have preinstalled meter, valve, and associated components for ready installation at site.	
Spool Pieces	:	SS 304 SCH40	
Flanges	:	As per ASME B16.5	
Flange MOC	:	SS 304	
Base Frame	:	Required, MOC MS	
Support Beam	:	Required, MOC MS	

Testing	:	Hydro Test, NDE required	
Drain / Vent : Required (fitted with valves of SS)		Required (fitted with valves of SS)	
Cables & Trays :		Required (Vendor specific based on Skid dimensions)	

Table 2: Mass flow meter

Mass flow meter				
Make	:	Vendor to specify		
Model no	:	Vendor to specify		
Quantity	:	As per BOQ		
Size	:	VTS		
Service	:	Alcohol		
Operating pressure	:	1-8 kg/cm2		
Operating temperature	:	Ambient		
Operating density	:	765 kg/m3 (Indicative)		
Operating viscosity	:	0.75 cP (Indicative)		
Allowable pressure drops	:	0.6 kg/cm2		
Ambient temperature	:	40 Deg-C (Indicative)		
Туре	:	Microprocessor based Coriolis mass flow and density transmitter. (Dual tube)		
Transmitter	:	Integral to sensor		
Sensor tube	:	Dual tube SS316L		
Wetted parts	:	SS316L		
Flow direction	:	Bi-directional		
Output	:	Inbuilt Flow (mass/volume), density, temperature, Alcohol Concentration		
Transmitter body	:	Die cast Alu (powder coated)		
Mass/volume accuracy	:	+/- 0.1% of reading		
Density	:	+/- 0.0005 gm/cc		
Temperature	:	+/-0.75 Deg-C for upto 50 Deg-C		
Repeatability	:	+/- 0.05% of. reading		
Local display	:	4-line, LCD display with touch control		
Electrical connection	:	½" NPT		

Mass flow meter				
Power consumption :		Vendor to specify (VTS)		
Data Outputs/Input	÷	1) Frequency - 10 KHz		
Functionality	:	2) 4-20mA Interface to temperature for compensation.		
Communication interface		Modbus RS485, WLAN Capability for Configuration and Diagnostics.		
Approval for Custody transfer	:	1) OIML/NMI		
		2) Indian Weights & Measures		
Indian Weights & Measureslock	:	Yes (required)		
Ingress protection	:	IP67		
Approval	:	Hazardous approval IIA/B		
Calibration	·	The Mass Flow Meter shall be factory calibrated for minimum 2 points, on Calibration rig which is accredited by the National /International Metrology authority in accordance with ISO/IEC 17025. The Standard of calibration shall be ISO 4185 Gravimetric Method. Secondary Method / Master Meter Method of Calibration are not acceptable. Manufacturers, who do not have in house facility for Gravimetric Calibration, shall send their Meters to FCRI / Other Certified Lab for Calibration. A copy of the ISO/IEC 17025 accreditation certificate of the Calibration Lab shall be submitted along with the bid. Proving & W&M stamping MFM shall be done at site.		

Table 3: Air Eliminator

Air Eliminator		
Make	:	Who fulfill the mentioned specifications and other conditions oftender
Model no	:	Vendor to specify
Qty		Refer BOQ
Mounting		In line at upstream of the flow meter or upstream of the pump as per vendor design.
Design code	:	ASME Sec VIII
End connection	:	Flanged as per ANSI b16.5
Seal / o ring	:	VTS
Body / flange material	:	SS 304
Flow rate	:	500 LPM (nominal)

Pressure	:	2-8 kg/cm2	
Drain /vent	:	Required (fitted with SS needle valves)	
	:	Vibronic level sensors shall be offered as recommended, during operation forum loading for AE's HH-LL cutoff for batch shut off. Alternately a continuous level sensor can be offered as per	
Note		recommended by vendor.	

Table 4: Density Meter

Density Meter		
Make	:	Vendor to specify
Model no	:	Vendor to specify
Quantity	:	As per BOQ
Size	:	VTS
Service	:	Alcohol
Operating pressure	:	As Per Datasheet
Line Size / Schedule		As per site condition
Hazardous Area Classification		Zone-1 Gr. IIA/IIB, T3.
Туре		Vibrating-element (or natural resonance)
Material Body & Flange		SS316
Other wetted parts		SS316
Vibraing Element Material		SS316
Accuracy		0.1 kg/m3 or better
Repeatability		0.02 kg /m3
Density Converter: 1. Density Converter 2. Interface detection 3. outputs 4. Power Supply to Density Converter		1. Required 2. Required 3. 4-20mA isolated for density signal and potential free contact for interface alarm 4. 240 VAC, Single Phase, 3wire, 50Hz (UPS)

Table 5: Temperature Transmitter

Temperature Transmitter		
Make	:	Vendor to specify
Model no	:	Vendor to specify
Quantity	:	As per BOQ
Size	:	VTS
Service	:	Alcohol
Operating pressure	:	As Per Datasheet

Input characteristics	
Measurement channels	
Measured variable	Temperature
Signal inputs	
Temperature input RTD 1	
Number	1
RTD type	PT100
Reference standard for temperature sensor	IEC 60751 (a=0.00385)
Output characteristics	
Analog Output	
Output type	Analog Output
Signal type	4-20 mA
Lower range value of signal	4.0 mA
Upper range value of signal	20.0 mA
Communication interface HART Communication Interface	
Type of protocol	HART
Power supply	
Power input circuit	
Supply mode	3 wire
Electrical connection	Screw terminal
Voltage type	DC voltage
Supply voltage DC min.	10.0 V
Climate class	Class C
Electromagnetic compatibility	EN 61326 series + NAMUR NE21
Mechanical construction	
Head transmitter housing	
Housing type	Transmitter housing
Housing design	Form B
Material housing	PC, UL94 V-2 UL
Reference Standard for housing	DIN EN 50446
Certificate and approvals device / transmitter	
Approval for general usage	CE mark
Ex certificates ATEX	

Approval type		ATEX
Equipment Group		Group II
Ignition protection type		Ex ia
Equipment category		1G
Zone		Zone 0
Ex designation	,	yes
Gas group		IIC
Temperature class		T6

Table 6: Pressure Transmitter (Pump Discharge)

Pressure Transmitter			
Model	:	Vendor to specify	
Туре	:	Smart	
Body	:	VTS	
Element	:	VTS	
Fill Fluid	:	VTS	
Process Connection	:	½" NPT	
Wetted parts	:	SS316L	
Accuracy	:	0.1% FS	
Measuring Range	:	10 barg (bar gauge)	
Output	:	2 Wire 4-20mA	
Mounting	:	Direct	
Display	:	LCD	
Housing	:	Die Cast Alu	
Ingress Protection	:	IP67	
Hazardous approval	:	Hazardous approval IIA/B	

Table 7: Digital Control Valve (Loading/Offloading metering station)

Digital Control Valve			
Model	:	Vendor to specify	
Туре	:	Rack & pinion actuator, solenoid controlled two Stages on/off. Pneumatic Operated or Electrical Actuated as recommended by vendor. In case of Pneumatic valve, required Air Compressor, Pneumatic line along with air manifold, fittings etc shall be in vendor's scope.	

Type of valve body	:	Ball	
Size	:	VTS	
End connection	:	Flanged as per ANSI b16.5	
Service	:	Alcohol	
Flow rate	:	500 LPM (nominal)	
Design pressure	:	15 kg/cm2	
Test pressure	:	1.5 times design pressure	
Operating pressure	:	2-8 kg/cm2	
Mounting	:	Downstream of flow meter	
Leakage class	:	VI	
Failure position	:	Close	
Valve body	:	SS 304	
Spring	:	SS	
Tubing & piping	:	SS	
Ball / trim	:	SS316	
All internal parts	:	SS	
SOV type	:	230 Vac (1no + 1nc)	
Coil insulation	:	F type	
Approval	:	Petroleum and explosive safety / Chief Controller of explosive (PESO/CCOE)	

Table 8: CONTROL VALVE ON-OFF TYPE (TANK INLET / OUTLET TANK SELECTION

CONTROL VALVE ON-OFF TYPE			
Model	:	Vendor to specify	
Туре	:	Rack & pinion actuator, solenoid controlled two Stages on/off. Pneumatic Operated or Electrical Actuated as recommended by vendor.	
		In case of Pneumatic valve, required Air Compressor, Pneumatic line along with air manifold, fittings etc shall be in vendor's scope.	
CONTROL VALVE ON-OFF TYPE			
Type of valve body	:	Ball	
Size	••	VTS	
End connection	:	Flanged as per ANSI b16.5	

CONTROL VALVE ON-OFF TYPE			
Model	:	Vendor to specify	
Туре	:	Rack & pinion actuator, solenoid controlled two Stages on/off Pneumatic Operated or Electrical Actuated as recommended by vendor. In case of Pneumatic valve, required Air Compressor, Pneumatic	
		line along with air manifold, fittings etc shall be in vendor's scope.	
Service	:	Alcohol	
Flow rate	:	500 LPM (nominal)	
Design pressure	:	15 kg/cm2	
Test pressure	:	1.5 times design pressure	
Operating pressure	:	2-8 kg/cm2	
Mounting	:	Downstream of flow meter	
Leakage class	:	V	
Failure position	:	Close	
Valve body	:	SS 304	
Spring	:	SS	
Tubing & piping	:	SS	
Ball / trim	:	SS316	
All internal parts	:	SS	
SOV type	:	230 Vac	
Coil insulation	:	F type	
Approval		Petroleum and explosive safetyorganization / Chief Controller of explosive (PESO/CCOE)	

Table 9: Isolation Valve (Manual)

Isolation Valve			
Model	:	: Vendor to specify	
Туре	:	Manual operated isolation valve	
Type of valve body	:	Ball	
Size	:	VTS	
End connection	:	Flanged as per ANSI b16.5	
Service	: Alcohol		
Flow rate	:	500 LPM (nominal)	
Design pressure	:	15 kg/cm2	

Isolation Valve		
Test pressure	: 1.5 times design pressure	
Operating pressure	:	2-8 kg/cm2
Mounting	:	Downstream of flow meter
Leakage class	:	VI
Valve body	:	SS 304
Ball / trim	:	SS316
All internal parts	:	SS

Table 10: Radar type level transmitter

Radar level Instruments			
Make	:	Vendor to specify	
Model	:	Vendor to Specify	
Measuring Principle	:	Frequency Modulated Continuous Wave (FMCW)/ Pulse Time of Flight	
Radar level Instrumen	its		
Operating Frequency	:	Approx. 80 GHzor VTS	
Process Connection	:	ANSI B16.5 CI 150	
Size	:	VTS	
Antenna	:	As per mfg std	
Antenna MOC	:	As per MFG (suitable for the service)	
Output	:	2 Wire 4-20mA HART	
Power Supply	:	24 VDC	
Display	:	4-line Display with Push Button	
Housing	:	Die Cast Aluminum	
Accuracy	:	+/- 1mm (factory Accuracy)	
Measuring Range	:	20 Mtr	
Pressure	:	-1 to 3 Bar	
Temperature	:	-40 to 100 Deg-C	
Ingress Protection	:	IP66	
Area Approval	:	Hazardous approval IIA/B	
Mounting	:	On top of vessel over flanged nozzle	

Table 11: Vortex Flow Meter

VORTEX FLOWMETER		
Make	:	Vendor to specify
Model no	:	Vendor to specify
Quantity	:	As per BOQ
Size	:	VTS
Service	:	Clear and Distilled water
Operating pressure	:	1-8 kg/cm2
Operating temperature	:	Ambient
Operating density	:	765 kg/m3
Operating viscosity	:	0.75 cP
Allowable pressure drop	:	0.6 kg/cm2
Ambient temperature		40 Dog C
Ambient temperature	:	40 Deg-C
Туре	:	Microprocessor based
Transmitter	:	Integral to sensor
Wetted parts	:	SS316L
Flow direction	:	Bi-directional
Output	:	4-20mA HART, Pulse
Mechanical construction		
Housing type		Compact
Housing design		GT20, Dual compartment
Degree of protection, Europe		IP66/67
Cable entry signal line		
Cable gland		M20
Housing device / transmitter		
Material housing		Aluminum, coated
Process connection		
Type of connection		Flange
Design sealing surface		RF
Reference Standard for connection		ASME B16.5
Nominal pressure		Accordingly Design Pressure
Material gasket		Graphite
Schedule		Sch.40
Operability		

Display languages	English
Operating element	Push buttons
Display element	
Display type	LCD display
Certificate and approvals device / transmitter	
Approval for general usage	CE mark
Calibration	
Calibration type	0.75% 3-point
Repeatability	0.10%

Table 12: PH analyzer

PH analyzer		
Measured Variable	:	pH and Temperature
Measuring Range	:	0-14
Temperature Range	:	0-135 Deg-C
Pressure Range	:	16 barg
Sensor Accuracy	:	+/- 0.1pH of FS
Ingress Protection	:	IP 68
Electrode Material	:	Glass (Type B)
Material Diaphragm	:	PTFE
Reference system	:	Gel
Sterilizable	:	Yes
Signal Transmission	:	Digital

Table 13: TDS

Conductivity Measurement (TDS)		
Make	:	Vendor to specify
Model no	:	Vendor to specify
Quantity	:	As per BOQ
Size	:	VTS
Service	:	Alcohol / Water
Operating pressure	:	As Per Datasheet
Line Size / Schedule		As per site condition
Measured Variables		Conductivity and Temeprature
Measuring Range		Conductivity: 10 micro Semen/cm to 20 micro Semen/cm Temeperature: -20 to 135 deg C
Cell Constant		k = 1.0 /cm
Temperature Compensation		Pt 100

Measured error conductivity	<= 5% of measured range
Repeatability - Conductivity	<= 0.2% of reading
Ambient Temperature	-20 to 60 deg C
Degree of Protection	IP 68 ((1 m water column, 25 °C, 24 h))
Materials (in contact with medium)	Electrodes - Graphite Sensor shaft - Polyethersulfone (PES- GF20) Thermal conductivity socket- Titanium 3.7035
Flow Assembly	Required
Transmitter	Required - for interfacing with Scada PLC system

Table 14: Transmitter for Analyzers

Transmitter		
Туре	:	Multi parameter
No of Inputs	:	4
Output	:	4-20mA HART
Power Supply	:	230 Vac Supply
Ambient temp	:	-20 to 60 Deg C
Electromagnetic	:	As per EN 61326-1:2006
Compatibility		
Ingress Protection	:	IP66/67
Other Feature	:	Navigator + Soft keys + Graphical Display

Table 15: Pump

I. Mono block pumps

- Pump should be suitable for applications in industrial trade effluent as per process requirement. It shall have end suction and side discharge. It should be of self-priming type.
- The pump shall be designed to operate satisfactorily without detrimental vibration, noise or dynamic imbalance over the required head range.
- The pump should be capable of developing the required total head at rated capacity.
- Pump casing should be finished smooth and designed so as to allow free passage of trade effluent.
- Pumps should be provided with anti-friction bearings. Bearings should be grease lubricated.
- Pump should be mechanical sealed.
- Pump should be furnished complete with flexible coupling.

- Coupling guard bolted to the base plate should be furnished.
- Base plate for pump and motor should be common. Suitable holes should be provided for grouting. Foundation bolts should be complete with nuts and washers.
- Hand holes should be provided in the casing to allow easy access to the impeller

a.	Casing :	CI
b.	Impeller :	CI
C.	Motor Body	Extruded Alluminium
d.	Flow	As per Design
e.	Head	As per Design
f.	Winding	100% Copper
g.	Base plate :	CI/MS fabricated with epoxy painted.

Table 16: Power, Signal and Control Cables

General Requirements

Cables shall be laid under the following conditions.

In air : Ambient temperature of 450 C
In ground : Ground temperature of 350 C

Depth of laying in : 750 mm for LV cables (Single Layer)

Ground

In conduits/pipes : Space factor of not more than 60 %

(Ratio of cable area to internal conduit area)

In trays : Single layer, touching each other

Specification of Power Cable

DESCRIPTION	CABLE SPECIFICATION
Make	As per Approved Make
Quantity	Refer BOM
Type of Cable	Copper Cable
Voltage Rating	Up to and Including 1100Volts
Construction	2.5Sqmm multi stranded annealed Bare electrolytic grade Copper Conductor (7/0.67)
Primary Insulation	Extruded PVC Compound as per IS 5831 type C

Inner Sheath	Extruded PVC Compound type ST2
Outer Sheath	Extruded PVC Compound type ST2 Up to 6 Core 1.24mm min. thickness & Above 6 Core 1.4mm, FRLS Black Cover
Arm•ourover Inner Sheath	Galvanized steel wire for UAD less than 13mm
Core Identification	
2 Cores	Red & Black
3 Cores _i	Red, Black & Green
4 Cores	Red, Yellow, Black & Green
Note:	Extra Core To be Considered if required

Specification of Control Cable

DESCRIPTION	CABLE SPECIFICATION
Make	As per Approved Make
Quantity	Refer BOM
Type Of Cable	Copper Cable
Voltage Class	660 V
Construction	1.5Sqmm multi stranded annealed Bare electrolytic grade Copper Conductor as per IS 8130
Primary Insulation	Extruded PVC Compound as per IS 5831 type C Min Thickness 0.7 mm
Inner Sheath	Extruded PVC Compound type ST2, Min thickness 0.3mm
Outer Sheath	Extruded PVC Compound type ST2 Upto 6 Core 1.24mm min. thickness & Above 6 Core 1.4mm, FRLS Black Cover
Armour Over Inner Sheath	Galvanized steel wire/ Flat Strip for UAD less than 13mm
Electrical Characteristics	Max. resistance of the cable shall not exceed 12.5 ohm/km at 10 deg. C
Core Identification	Upto 4 Core cable colour core for identification & for above 5 core cable all shall be grey in colour & Core identification number shall be provided at a distance of not more than 1 meter.

• Specifications of Signal Cable

DESCRIPTION	CABLE SPECIFICATION
Make	As per Approved Make

Quantity	Refer BOM
Type Of Cable	Single pair/multi pair shielded copper cable
Voltage Grade	300/500
Construction	1.5 Sqmm multi stranded annealed Bare electrolytic grade Copper
Primary Insulation	PVC Compound as per IS 5831 type C Min Thickness 0.7 mm
Pair Twist	Two cores of the pair shall be twisted. Ten number of twists per meter shall be minimum
Inner Sheath	FRLS PVC Compound type ST2, IS5831
Outer Sheath	FRLS PVC Compound type ST2, 1.6mm thick, Light Blue Cover
Armor Over Inner Sheath	Galvanized steel
Core Identification	Pair no. on each core at every 1 meter
Insulation Color	White & Blue for all pair
RIP Cord	Required below inner sheath

Applicable standards

The standards and code of practices referred to below shall be the latest editions including all official amendments and revisions.

PVC insulated cables : IS 1554
PVC insulation and sheath : IS 5831

of electric cables

Conductors for insulated : IS 8130

Electric cables

• Inspection & testing

The cables shall be tested in accordance with the latest edition of IS:1554. The test shall include

Test for conductor

Test for thickness of insulation

Test for laying up

Test for thickness of laying up

Test for thickness of inner sheath

Test for armouring

Test for thickness of outer sheath

Cabling system

The cabling system covers the supply of cable trays, racks, supports and associated accessories, hardware and their installation. It shall be the responsibility of the bidder to complete the cabling system in all respects.

The following points shall be noted while planning cabling system.

Inside the building: Cable trenches with cable racks and or cable trays

Cables shall be clamped to the cable racks at regular intervals

All steel sections such as angles, channels, and brackets etc., required for supporting the cable trays shall be supplied by the bidder.

Flexible metallic conduits shall be used for termination of connection to equipment such as motors, limit switches and other apparatus.

CABLE TRAYS

Scope of work:- Supply and installation of 450,300,150 Wide FRP cable trays shall be Supplied as per the requirements in line with the specifications for all plants. All the cables Shall be dressed properly with nylon cord to the satisfaction of Engineer-in-Charge.

Conditions at full load shall be within the limits stated in the following table:

S.NO.	SYSTEM ELEMENT	MAXIMUM PERMISSIBLE VOLTAGE DROP
a)	Cable between equipment to panel	
		0.5%
		1 to 1.5%
b)	Cable between Auxiliary Switchboard & Lighting Panel	1 to 1.5%
c)	Circuit between lighting panels and lighting points	4%
d)	DC Supply Circuit (Electrical Controls)	5%
e)	DCDB to Control Room	2%
f)	UPS outgoing circuit	5%

• Installation of Cables

The Bidder shall install, test and commission the cables in accordance with the approved drawings, and instructions issued by Engineer's Representative. Cables shall be laid directly buried in earth, on cable racks, in built up trenches and supports, on trays, in conduits and ducts or bare on walls, ceiling etc. as per approved drawings. Bidder's scope of work includes unloading, laying, fixing, jointing, bending, and termination of the cables. The Bidder shall also supply the necessary materials and equipment required for jointing and termination or the cables.

All apparatus, connections and cable work shall be designed and arranged to minimise risk of fire and any damage, which might be caused in the event of fire. Wherever cables pass through floor or wall openings or other partitions, suitable bushes of an approved type shall be supplied and put into position by the Bidder. The Bidder shall seal the cables into the bushes using fire resisting materials to prevent the spreading of fire through each partition.

Standard cable grips and reels shall be utilised for cable pulling. If unduly difficult pulling occurs, the Bidder shall check the pull required and suspend pulling until further procedure has been approved by the Engineer's Representative. The maximum pull tension shall not exceed the recommended value for the cable measured by the tension dynamometer. In general, any lubricant that does not injure the overall covering and does not set up undesirable conditions of electrostatic stress or electrostatic charge may be used to assist in the pulling of insulated cables in conduits and ducts.

After pulling the cable, the Bidder shall record cable identification with date pulled

neatly with waterproof ink in linen tags / aluminium tag and shall securely attach such identification tags. Identification tags shall be attached to each end of each cable with non-corrosive wire. The said wire must be non-ferrous material on single conductor power cable. Tags may further be required at intervals on long runs of cables on cable trays and in pull boxes. Cable and joint markers and RCC warning covers shall be provided wherever required.

Sharp bends and kinks in cables shall be avoided. The bending radii for various types of cables shall not be less than 15 times the overall diameter of the cable.

Power, control and instrumentation cables shall be laid in separate cable racks/trays.

Where cables cross roads or water/industrial effluent pipes, the cables shall be laid in reinforced spun concrete or steel pipes. For road crossings, the pipe for the cables shall be buried at not less than one metre depth.

Cables laid in ground shall be laid on a 75 mm riddled earth bed. The cables shall then be covered on top and at their sides with riddled earth of depth of about 150 mm. This should be then filled Upto a depth of about 100 mm above the top of uppermost cable to provide bedding for the protective cable covers which shall be placed centrally over the cables. The protective cable covers for LV cables may be of earthenware. The RCC covers shall have one hole at each end, to tie them to each other with GI wires to prevent displacement. The trench should be then backfilled with the excavated soil and well rammed in successive layers of not more than 300 mm thick, with the trenches being watered to improve consolidation wherever necessary. To allow for subsidence, a crown of earth not less than 50 mm in the centre and tapering towards the sides of the trench should be provided.

Each cable shall be pulled into the particular conduit and shall be taken from the particular reel designated for the run. In hand holes, pull boxes or junction boxes having any dimension over 1000 mm, all conductors shall be cabled and/or racked in an approved manner. Care shall be taken to avoid sharp bending or kinking cables, damaging insulation or stressing cable beyond manufacture's recommendations in pulling. Cable shall be protected at all times from mechanical injury and from absorption of moisture at unprotected ends.

In each cable run, some extra length shall be kept at a suitable point to enable one or two 'straight through joints' to be made, should the cable develop a fault at a later date.

Cables on cable racks, and conduits shall be formed to avoid bearing against edges or trays, racks, conduits or their supports upon entering or leaving racks or conduits.

Cables splices shall not be used except where permitted by the Engineer's Representative. Splices shall be made by Bidder for each type of wire or cable in accordance with the instructions issued by cable manufacturers and the Engineer's Representative. Before splicing, insulated cables shall have conductor insulation stepped and bound or pencilled for recommended distance back from splices to provide a long leakage path. After splicing, insulation equal to that on the spliced conductors shall be applied at each splice.

At cable terminal points, where the conductor and cable insulation will be terminated, terminations shall be made in a neat, skilful and approved manner by specially trained staff. Terminations shall be made by the Bidder for each type of wire or cable in accordance with instructions issued by cable manufacturers or the Engineer's Representative.

Control cable termination shall be made in accordance with wiring diagrams, using proper colour codes for the various control circuit, by code marked wiring diagram.

When control cables are to be fanned out and corded together with cord, the Bidder shall cord together. If there is any doubt about correctness of connection, the Bidder

shall make a temporary connection with sufficient length of cable so that the cable can be switched to another terminal without splicing. After correct connections are established, cables shall be cut to their correct lengths, connected to terminals in the specified manner, and corded together where necessary to hold them in place in a skilful manner. Jointing of cables shall be in accordance with relevant Indian Standards Codes of Practice and manufacturer's instructions.

Materials and tools required for cable jointing work, including cold setting bituminous compound shall be supplied by the Bidder. Cables shall be firmly clamped on either side of a 'straight through joint' at a distance of not more than 300 mm away from the joints. Identification tags shall be provided at each joint at all cable terminations.

Cable seals shall be examined to ascertain if they are intact and that cable ends are not damaged. If the seals are found to be broken the cable ends shall not be jointed until after due examination and testing under supervision of the Engineer's Representative. Before joining is commenced, insulation resistance of both sections of cables to be jointed shall be checked by Megger.

Connections to Mass flow meter, Density Meter, float switches, level electrodes, limit switches, pressure switches, thermocouples, thermostats and other miscellaneous equipment shall be done as per manufacturer's drawings and instructions.

Metal sheath and armour of the cable shall be bonded to the earthing system of the station. The size of conductor for bonding shall be appropriate with the system fault current.

All cables shall be tested for insulation resistance before jointing. After jointing is completed, all cables shall be tested again by a 1000 volt Megger.

Cable core shall be tested for

- a) Continuity;
- b) Absence of cross phasing;
- c) Insulation resistance to earth; and
- d) Insulation resistance between conductors.
 Bidder shall furnish testing kits and instruments required for field testing.

Earthing

A copper earthing bus shall be provided and extended throughout the length of the Switchboard. It shall be bolted to the framework of each unit and brazed to each breaker earthing contact bar. It shall be located at the bottom of the board.

The earth bus shall have sufficient cross section to carry the momentary short circuit and short time fault current for at least 1 second or higher as specified, without exceeding maximum allowable temperature rise. The earth bus shall be properly supported to withstand stresses induced by the momentary short circuit current.

Suitable clamp type terminals at each end of the earth bus shall be provided to suit the Size of the earthing conductors.

Bolted joints, slices, tap, etc. to the earth bus shall be made with at least two bolts.

Positive earthing of circuit breaker frame shall be maintained when it is in the connected position and in all other positions whilst the auxiliary circuits are not totally disconnected. Hinged doors shall be earthed through flexible earthing braid of adequate cross section. All non-current carrying metal work of the switchboard shall be effectively bonded to the earth bus.

Positive connection of the frames of all the equipment mounted in the switchboard to the earth busbar shall be maintained through insulated conductors of size equal to the earth busbar or the load current carrying conductor, whichever is smaller.

All instrument and relay cases shall be connected to earth busbar by means of 1100V grade.

green colored, PVC insulated, stranded, tinned copper, 2.5 sq. mm conductor looped through each of the earth terminals.

6. Fire Proof Sealing (FPS) System

Fire proof sealing system shall be provided and shall consist of

a) Fire-stops / fire-seals for sealing of cable / cable tray and conduit / pipe penetrations, both horizontal and vertical, through brick or RCC walls / floors, to prevent the spread of fire from one area to other areas by fire-resistant barriers.

The FPS system shall also include all the necessary accessories and equipment required for supporting, holding in position, fixing and installation of the fire-stop.

The FPS system shall comply in all respects with the requirements of the codes and Standards mentioned herein IEC-111 and IEC-112.

Panels - Glass Reinforced Plastic

Any panel required to be installed outside buildings shall, unless otherwise approved by the Engineer, be manufactured from double-skin, resin-bonded fiberglass, with a totally Encapsulated infill of rigid weatherproof and 'boil proof' plywood to BS 12 3:2 1 between the two skins to provide a rigid and vandal-proof enclosure. The environmental rating shall be IP65 or better.

For any application in a non-temperate climate or where so specified elsewhere, the roof section shall be sloping and have a totally-encapsulated infill of end-grain balsa instead of plywood. Box-section steel shall be encapsulated into door edges and door frames. Door locks, handles and hinges shall be of a high tensile strength, non-corroding alloy with stainless steel pins and through fixing bolts. Large plane surfaces shall have adequate reinforcing to ensure rigidity.

The doors shall be complete with latching handles and locks. All door catches and locks shall latch onto steel-reinforced surfaces. Threaded studs shall be incorporated into the design of the panel for the mounting of sub frames within the panel. Any panel drilled to provide fixings for internal equipment will not be accepted. Each cubicle shall be provided with a floor or deck with a removable gland plate for cable entry.

The laminate material shall have flame-retardant characteristics in compliance with BS 476 Class 2, and shall retain 'stability, integrity and insulation' for 3 minutes. Color-impregnated gel coats backed by colored resin shall be used to ensure maintenance free and 'color- fast' finishes. The external finish color shall be advised by the Engineer and the internal finish color shall be white. The fronts of externally-visible instruments and windows shall be of glass. An air-gap of 100mm shall be provided between the top surface of the panel and its protective canopy. All internal equipment shall be mounted on supports built into the fiberglass structure. Fixing bolts through the skin will not be accepted.

Panel Earthing

A continuous copper earth bar of not less than 25mm X 6mm cross section shall run the full length of each panel and shall be securely fixed and bonded electrically to the main frame.

The cable gland- plates and the earth bar shall be provided with suitable brass terminals of not less than 6mm diameter for connecting the metal cladding or armouring of all incoming and outgoing cables to the station earthing system.

A second continuous copper earth bar of not less than 25mm % 6mm cross section,

Electrically isolated from the steelwork of the panel and metal cladding and armouring of cables, shall be provided for earthing the signal earth connection of each instrumentation and control device and the screen(s) of each instrument cable not earthed elsewhere to the station instrumentation earth plate. The earth bar shall have sufficient brass terminals as specified above for each instrumentation and control device and the screen of every shielded cable plus 25% spare terminals. In multi-section panels, each earth bar shall be electrically bonded to the corresponding bars in the adjacent section(s). Instrumentation and instrument cable screen earthing shall comply with BS 6739: 1986, Section 10, unless otherwise stated in this clause.

Panel Labels

Labels shall be provided for every panel to describe the duty or otherwise identify the panel and its sections and every instrument, component and item of equipment mounted internally and externally. Where applicable, front-of-panel labels shall be as shown in the Specification drawings. Wording shall be clear, concise and unambiguous and shall be subject to review by the Engineer before manufacture. Each label shall be permanently secured to the surface near the item to which it refers. Externally-fitted labels shall be of Perspex or other approved transparent plastic, with letters and numbers rear-engraved and filled with black. The rear surface of each Perspex label shall be finished with a coat of paint of the same color as the panel external finish. Instrument duty labels fitted externally shall be below the item to which they refer. Embossed tape or similar adhesive labels will not be approved.

Laminated materials or rear-engraved and filled plastic shall be used for internally-fitted labels, which shall be white with engraved black letters. Labels conforming to the requirements of the preceding paragraphs or other approved means shall be provided: Labels

- To describe or identify circuits or circuit components
- To identify DC polarity
- To warn or remind about dangerous or potentially-dangerous circumstances
- Wherever elsewhere specified

Unless otherwise specified, all engraving shall be in plain block letters, 4mm high. The Minimum practicable number of different sizes shall be used. Manufacturers' nameplates Shall not be fitted on panel external surfaces.

Tests for instrumentation & control system

Tests of the equipment/systems at the manufacturer's premises will be required in accordance with the Conditions of Contract. All inspection, examination and testing shall be carried out in accordance with appropriate standards.

All measuring/test instruments used for such tests shall be calibrated and certified by an approved independent testing authority not more than 28 days prior the test in which they are used. Supporting calibration and traceability certificates shall be provided. The Engineer's Representative reserves the right to impound any instrument immediately after test for independent testing. A certificate shall be produced by the Bidder prior to carrying out every test showing the readings obtained, calculations and full details of the calibration certificates referred to.

If the Engineer's Representative witnesses a test/ calibration he shall be given a copy of the test / calibration results and certificates immediately. Whether he witnesses a test / calibration or not, copies of test/ calibration certificates shall be sent to the Engineer's

Representative. No item of the equipments/systems shall be forwarded to the Site until its test / calibration certificate has been approved in writing by the Engineer's Representative.

Certificates shall be clearly identified by serial or reference number where possible to the material being certified and shall include information required by the relevant Reference Standard or Specification clause.

Inspection at Manufacturer's Premises

The inspection of all equipments/systems require to be supplied to complete the Works shall be done as detailed in this Specification. Only defect free and sound material meeting the technical requirements of this Specification and in accordance with a high standard of engineering would be acceptable to the Engineer's Representative.

For meeting these requirements of inspection, testing shall be carried out by the Bidder and certificates submitted to the Engineer's representative who will have the right to witness or inspect the above mentioned testing/inspection at any stage desired by him. Valid calibration certificates for test instruments shall be produced for the Engineer's consent in advance of testing and if necessary instruments shall be recalibrated or substituted before the commencement of the test. Items of equipments/ system not covered by standards shall be tested in accordance with the details and programme agreed between the Engineer and Bidder.

If during or after testing any item of the equipments/ systems fails to achieve its intended duty of otherwise prove defective it shall be modified or altered as necessary, retested and re inspected as required by the Engineer.

No equipment/system is to be delivered to Site without the above described inspection having been carried out or officially waived in writing by the Engineer's Representative.

❖ OPERATION AND MAINTENANCE MANUAL

The submission of the as-built drawings and the operation and maintenance manual for the system is the precondition for the final payment.

The Bidder has to submit as operation and maintenance manual for project components created under this contract after the physical completion of the work. This manual will be submitted as draft at the date of physical completion and as final version one month after commissioning. It shall include all the experience made during the training given to the operators during the commissioning period. The Bidder will prepare this manual in cooperation with his suppliers and after consultation with the Procuring Entity's representative for detailed contents. It will at least contain the following items.

General description of the project components and their functioning. Step- by step procures for project components functioning., mechanical electrical, instrumentation, piping drawings details, charts .Nomenclature of all the equipment (mechanical, electrical, instrumentation, power and signal cables, electrical fixtures etc.)

- i. For each item of the equipment
- ii. Drawing charts (if required)
- iii. Operational Instructions
- iv. Calibration charts (if required)
- v. Fault identification and location guides and charts
- vi. Repair instructions (if repair by operations if possible)
- vii. Maintenance instructions
- viii. Spare parts list with addresses of suppliers and procedures for ordering.

- ix. Preventive maintenance schedules for all the equipment, showing the type and frequency of maintenance of different items
- x. Emergency management for specimen emergency situation which might occur due to external or internal factors
- xi. Logs for the operator of the system
- xii. Operating hours
- xiii. Salient indicators of the operation
- xiv. Maintenance operations
- xv. Fault and actions taken
- xvi. Other events

Address and telephone number to contact in case of operation problems shall be provided.

It is emphasized that a collection of standard literature of a general nature, unaccompanied by specific drawings and descriptive matter relating to the work as commissioned, shall not be acceptable.

The operation and maintenance manual shall be bound in one or several loose-leaf binders designed to prevent loss and damage of the contents. The binders shall be tilled, numbered, and have a table of contents of all information contained.

❖ PIPING & INSTRUMENTATION DRAWING (P&I D)

The Bidder shall submit to the Procuring Entity's representative within one months of actual completion, "Completion" Drawings. These Drawings shall be accurate and correct in all respects and shall be shown to and by the Procuring Entity's representative.

Completion Drawings as specified below on shall be supplied by the Bidder two prints and one polyester film, along with a soft copy in CD. These drawings shall be developed in Auto CAD recent version. Drawings shall be of standards size.

All drawings shall be prepared in appropriate scale and with adequate notes, legends, titles, etc. for clarity.

• CALIBRATION OF THE INSTRUMENTS:- All the instruments shall be calibrated for accuracies as per applicable standards. Calibration shall be carried out at 0,20,40,60,80, and 100% of the range of the instrument in both increasing and decreasing directions using test instruments to simulate inputs read outputs that are rated to an accuracy of at least 5 times greater than the specified accuracy of the instrument being calibrated. The instrument will be acceptable if the accuracy and repeatability are better than those specified. The instrument used for testing shall hold a valid calibration certificate from a recognized laboratory. The test instruments shall have accuracies traceable to the National Bureau of Standards as applicable:-

S.N.	Instrument name	Calibration	Calibration site
		required	
1	Mass flow meter	In every 2 years	Calibrated through reputed Lab approved by
			Govt.
2	Vortex flow meter	In every 1 years	Calibrated at site.
3	Temperature transmitter	In every 1 years	Calibrated at site.
4	Pressure transmitter	In every 1 years	Calibrated at site.
5	Density meter	In every 2 years	Calibrated through reputed Lab approved by
			Govt.
6	Air eliminator	In every 6	Regular cleaning required at site.
		months	
7	Valves	NA	

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calibrated if required likes radar transmitter As per requirement On time

GENERAL TERMS & CONDITIONS OF BID AND CONTRACT

1. The bidder shall have to carefully study and understand the conditions, specifications, size, make etc. of

the goods to be supplied. If it has any doubt about the meaning of any term, condition or specifications etc. he should refer to officer in charge and get clarification. The decision of the company regarding interpretation of the conditions and specifications shall be final and binding on the bidders.

- 2. Bidders are hereby explicitly warned that individuals signing the bid must specify as follows :
 - a. Whether signing as "sole proprietor of the firm?"
 - b. Whether signing as registered active partner of the firm?
 - c. Whether signing for the firm on the basis of power of attorney?
 - d. In case of companies and registered firms, whether signing as secretary, manager, partner, director, etc. The authorized signatory shall will submit an authorization from the company to do so. A copy of any document under which such authority is given should be forwarded with the bid if a copy has not already been sent to the company.
- 3. Bidder, who is not registered under the GST act, where its business is located, may not be eligible for bid. The GST registration number should invariably be quoted.
- 4. If a bidder imposes conditions which are in addition to or in conflict with the conditions mentioned herein, its bid may be rejected.
- 5. Rates quoted must be inclusive of all charges and taxes except GST which shall be added at the prevailing rates. The rates quoted must be F.O.R. distillery/ warehouses of reduction centers.
- 6. The bidder shall not assign or sublet his contract or any part thereof to any other agency.
- 7. The bidder should sign and upload bid form at the end of each page as token of his acceptance of all the terms and conditions of the bid.

8. Bid Security -

- i. In case of open competitive bidding, two-stage bidding, rate contract, electronic reverse auction, bid security shall be 2% of the estimated value of subject matter of procurement put to bid. In case of small-scale industries of Rajasthan it shall be 0.5% of the quantity offered for supply and in case of sick industries, other than small scale industries, whose cases are pending with Board of Industrial and Financial Reconstruction; it shall be 1% of the value of bid. Concessional bid security may be taken from registered bidders as specified by the state government. Every bidder, if not exempted, participating in the procurement process shall be required to furnish the bid security as specified in the notice inviting bids.
- ii. In lieu of bid security, a bid securing declaration shall be taken from departments' of the state Government and undertakings, corporations, autonomous bodies, registered societies, cooperative societies which are owned or controlled or managed by the state government and government undertakings of the central government.
- iii. Bid security instrument or cash receipt of bid security or a bid securing declaration shall necessarily accompany the sealed bid.
- iv. Bid security of a bidder lying with the procuring entity in respect of other bids awaiting decision shall not be adjusted towards bid security for the fresh bids. The bid security originally deposited may, however, be taken into consideration in case bids are re-invited.
- v. The bid security may be given in the form of cash by RTGS, banker's cheque or demand draft or bank guarantee, in specified format, of a scheduled bank. The bid security must remain valid for thirty days beyond the original or extended validity period of the bid.
- vi. Prior to presenting a submission, a bidder may request the procuring entity to confirm the acceptability of proposed issuer of a bid security or of a proposed confirmer, if required. The procuring entity shall respond promptly to such a request.
- vii. The bank guarantee presented as bid security shall be got confirmed from the concerned issuing bank. However, the confirmation of the acceptability of a proposed issuer or of any proposed confirmer does not preclude the procuring entity from rejecting the bid security on the ground that the issuer or the confirmer, as the case may be, has become insolvent or has otherwise ceased to be creditworthy.
- viii. The bid security of unsuccessful bidders shall be refunded soon after final acceptance of successful bid and signing of agreement and submitting performance security.

- ix. The bid security taken from a bidder shall be forfeited in the following cases, namely:
 - a. when the bidder withdraws or modifies its bid after opening of bids;
 - b. when the bidder does not execute the agreement, if any, after placement of supply / work order within the specified period;
 - c. when the bidder fails to commence the supply of the goods or service or execute work as per supply / work order within the time specified;
 - d. when the bidder does not deposit the performance security within specified period after the supply / work order is placed; and
 - e. if the bidder breaches any provision of code of integrity prescribed for bidders specified in the act and chapter VI of these rules.
- x. In case of the successful bidder, the amount of bid security may be adjusted in arriving at the amount of the performance security, or refunded if the successful bidder furnishes the full amount of performance security.
- xi. The procuring entity shall promptly return the bid security after the earliest of the following events, namely:
 - a. the expiry of validity of bid security;
 - b. the execution of agreement for procurement and performance security is furnished by the successful bidder:
 - c. the cancellation of the procurement process; or
 - d. the withdrawal of bid prior to the deadline for presenting bids, unless the bidding documents stipulate that no such withdrawal is permitted.

9. Performance security-

- a) Performance security shall be solicited from all successful bidders except the department's of the state government and undertakings, corporations, autonomous bodies, registered societies, co-operative societies which are owned or controlled or managed by the state government and undertakings of the central government. However, a performance security declaration shall be taken from them. The state government may relax the provision of performance security in particular procurement or any class of procurement.
- b) The amount of performance security shall be five percent, or as may be specified in the bidding documents, of the amount of supply order in case of procurement of goods and services. In case of Small Scale Industries of Rajasthan it shall be one percent of the amount of quantity ordered for supply of goods and in case of sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR), it shall be two percent of the amount of supply order.
- c) Performance security amount exceeding Rs.10.00 lac shall be furnished in any one of the following forms
 - i) Bank draft or banker's cheque of a scheduled bank;
 - Bank guarantee/s of a scheduled bank shall be got verified from the issuing bank. Other conditions regarding bank guarantee shall be same as mentioned in the rule 42 of RTPP Rules 2013 for bid security;
 - iii) Performance security deposit shall remain valid for a period of sixty days beyond the date of completion of contractual obligations of the bidder. This shall be returned after successful completion of the contract. In case non fulfillment of the contract, security amount so deposited can be forfeited in full or in part. Decision of the director in charge in this regard shall be final. No interest shall be paid on such deposit. Adjustment of balance of previous performance security against past bids, if any, will not be allowed.

10. Execution of agreement-

a) A procurement contract shall come into force from the date on which the letter of acceptance or letter of intent is dispatched to the bidder.

- b) The successful bidder shall sign the procurement contract within a period specified in the bidding document or where the period is not specified in the bidding document then within fifteen days from the date on which the letter of acceptance or letter of intent is dispatched to the successful bidder.
- c) If the bidder, whose bid has been accepted, fails to sign a written procurement contract or fails to furnish the required performance security with in specified period, the procuring entity shall take action against the successful bidder as per the provisions of the act and these rules. The procuring entity may, in such case, cancel the procurement process or if it deems fit, offer for acceptance the rates of lowest or most advantageous bidder to the next lowest or most advantageous bidder, in accordance with the criteria and procedures set out in the bidding documents.
- d) The bidder shall be asked to execute the agreement on a non-judicial stamp of specified value 500/- of the contract amount or value set forth in such contract.

11. Bid shall be valid

- a. 180 days from deadline for submission of bids...
- b. Subsequent to acceptance of bid, the rate shall remain valid throughout the contract period or for the period for which bids are invited whichever is higher.
- 12. Right to vary quantity- If the procuring entity does not procure any subject matter of procurement or procures less than the quantity specified in the bidding documents due to change in circumstances, the bidder shall not be entitled for any claim or compensation except otherwise provided in the bidding documents.
- 13. If the rate contract holder, its affiliates and associates quotes / reduces its price to render similar goods, works or services at a price lower than the rate contract price to anyone in the state at any time during the currency of the rate contract, the rate contract price shall be automatically reduced with effect from the date of reducing or quoting lower price, for all delivery of the subject matter of procurement under that rate contract and the rate contract shall be amended accordingly. The firms holding parallel rate contracts shall also be given opportunity to reduce their price by notifying them the reduced price giving them fifteen days' time to intimate their acceptance to the revised price. Similarly, if a parallel rate contract holding firm reduces its price during currency of the rate contract, its reduced price shall be conveyed to other parallel rate contract holding firms and the original rate contract holding firm for corresponding reduction in their prices. If any rate contract holding firm does not agree to the reduced price, further transaction with it, shall not be conducted.
- 14. The bids should be submitted along with samples, if required.

15. Liquidated Damages:

- (i) If the contractor fails to execute the order/contract within the period specified in the bid, and if such failure have arisen from, any unforeseen cause such as strike, fire, accident, any natural calamity resulting in stoppage of work in the factory, of the manufacturer or similar reasons which the Director In charge of RSGSM Ltd. may feel valid for an extension of the time, may extend the period without charging any liquidated damages. His decision shall be final regarding the sufficiency or otherwise for extension of time.
- (ii) If the bidder fails to execute the order within the period specified in the bid, the Director In charge of RSGSM Ltd may at his discretion may allow extension of time subject to recovery from the bidder as liquidated damages with 18% GST and not by way of penalty, a sum equal to the following percentage of the value of goods which the bidder has failed to supply for the period of delay as stated below:
 - a) Delay up to one fourth period of the prescribed delivery period 2.5% + 18% GST
 - b) Delay exceeding one fourth but not exceeding half of prescribed delivery period 5% + 18% GST
 - c) Delay exceeding half but not exceeding three fourth of the prescribed delivery period 7.5% + 18% GST

d) Delay exceeding three fourth but not exceeds the period equal to the prescribed delivery period - 10% + 18% GST

Notes:

- (a) Fraction of a day in reckoning the period of delay in supply shall be eliminated if it is less than half a day.
- (b) The maximum amount of liquidated damages shall be 10%.
- (c) When the successful bidder is unable to complete the order/contract within the specified or extended period, the company shall be entitled to accept supply from the open market without giving any notice to the bidder but at his risk and cost i.e. bidder's account and risk the goods or any part thereof which the bidder has failed to supply or if not available the best and nearest available substitute thereof or to cancel the contract and the bidder shall be liable for any loss or damage which the company sustained by reason of such failure on the part of the bidder. But the bidder shall not be entitled to any gain on such purchase made against default. The recovery of such damage shall be made from any sum accruing to the bidder under this or any other contract with the company. If recovery is not possible from the bills and the bidder fails to pay the loss or damage within one month, the recovery shall be made under any law for the time being in force or from any other bills outstanding with the company.
- (d) If the supplier requires an extension of time in completion of contractual supply on account of occurrence of any hindrance, he shall apply in writing to the authority, which has placed the supply order, for the same immediately on occurrence of the hindrance but not after the stipulated date of completion of supply.
- (e) Delivery period may be extended with or without liquidated damages if the delay in the supply of goods is on account of hindrances beyond the control of the bidder.
- 16. In the event of breach of the contract at any time on the part of the contractor/ supplier, the contract may be terminated summarily by the Director In charge of the company with such conditions as may be deemed fit.
- 17. All legal proceedings, arising out of this contract shall be subject to the jurisdiction of the courts situated at Jaipur city only.
- 18. In case of any dispute arising out of any matter related to the bid / contract / agreement, the matter will be referred to sole arbitrator appointed from RSGSM empanelled arbitrator from below list appointment of an arbitrator shall be done mutually agreed by both the parties:-

क्र.स.	मध्यस्थ (Arbitrator) का नाम					
1.	जस्टिस आलोक शर्मा, सेवानिवृत्त न्यायाधिपति राजस्थान उच्च न्यायालय, जोधपुर/ जयपुर					
2.	जस्टिस महेन्द्र माहेश्वरी, सेवानिवृत्त न्यायाधिपति राजस्थान उच्च न्यायालय, जोधपुर/					
* 10	जयपुर					
3.	जस्टिस चतरा राम जाट, सेवानिवृत्त न्यायाधिपति राजस्थान उच्च न्यायालय, जोधपुर/					
	जयपुर					
4.						
5.						
6.						
7.	श्री अनूप सक्सेना, सेवानिवृत्तं न्यायाधीश (डिस्ट्रिक्ट जज्)					
8.	श्री जमनलाल जांगिड (सेवानिवृत्त) राजस्थान लेखा सेवा					
9.	श्री जी.डी. व्यास (सेवानिवृत्त) राजस्थान लेखा सेवा					

The place of arbitration shall be Jaipur. The fees and other expenses of the arbitrator shall be borne by both parties equally.

- 19. If the bidder resiles from his offer or offers new terms after opening of the bid, its bid security is liable to be forfeited with 18% GST.
- 20. **Procuring entity's right to accept or reject any or all bids** The procuring entity reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the bidders. Reasons for doing so shall be recorded in writing.

- 21. The bidder shall be responsible for the proper packing of goods so as to avoid damages under normal conditions of transport by road, sea, rail or air and delivery of the material in good conditions to the consignee at destination.
- 22. It is of the opinion that it is essential to evaluate the technical aspects of a bid before considering its financial aspect, call for bids in two envelopes, namely:-
 - (i) the techno-commercial bid containing the technical, quality and performance aspects, commercial terms and conditions; and
 - (ii) the financial bid containing financial aspects including the price.
- 23. In case the procuring entity calls for bids in terms of clause (b) of sub-section (1), the techno-commercial bid shall be opened and evaluated first and the financial bid of only those bids which have been found technically acceptable, shall be opened and evaluated.
- 24. **Risk and Cost means** when the Bidder fails to complete the Contract despite due notices, the procuring entity may terminate and get the balance work of the BOQ/ Activity Schedule carried out at the risk and cost of the Bidder and the difference of cost at which the balance work is carried out through the Department/ Organization or another agency is debited to the Bidder.
- 25. **Specifications** means the BIS, IRC, and other Code Specification of the Works followed by relevant Department of the Government of India/ State Government and /or included in the Contract and any modification or addition made or approved by the RSGSM.
- 26. **Defects Notification Period :-** The Bidder shall have to repair & restore the defect/ deficiency after a notice issued by the RSGSM, who will be free to get it remedied at the risk and cost of the Bidder besides other action being taken as per the Contract.
- 27. Bidder shall be complied with and shall continue to comply with the provisions of the code of integrity for bidders as specified in the Rajasthan Transparency In Public Procurement Act, 2012, the Rajasthan Transparency In Public Procurement Rules, 2013 and this bidding document in this procurement process and in execution of the contract;
- 28. All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the Procuring Entity's risks are the responsibility of the Bidder.

29. Safety Procedures at the site of works: The Bidder shall:

- i. Prepares and submits for approval by the RSGSM an auditable safety plan at Site in accordance with relevant Code. The Bidder shall comply with all applicable safety regulations;
- ii. Take care for the safety of all persons entitled to be on the Site;
- iii. Use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons;
- iv. Provide fencing, lighting, guarding and watching of the worksuntil completion over of Works]; and
- v. In addition to the provisions of this Contract, the Bidder shall follow the safety code of the Department.
 - 30. **Protection of the Environment :-** The Bidder shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.
 - 31. **Security of the Site** and Works: the Bidder shall be responsible for keeping unauthorized persons off the Site, The Bidder shall arrange to keep the site and works secure from manmade disasters, explosions by design or by accident or both at his own cost. Bidder shall also ensure that Deputed manpower shall not involve in illegal activities.

- 32. The Bidder shall provide at his own Cost all materials plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and Temporary Works required for the proper execution of the Works,
- 33. The technical staff should always be available at site whenever required byRSGSM to take instructions. Technical officers/ staff deployed by the Bidder at any constructionSite will be responsible for proper quality of Works and physical targetedprogress of the Works.
- 34. The bidder shall comply with the provision of all labour legislation including the requirement of the Payment of Wages Act and the rules framed there under and modifications thereof in respect of men employed by him in carrying out the contract. Firm shall be liable for execution of work entrusted to them as per Procuring in case of total persons deployed by Firm will be 50 or more at any point of time during the contract period, then the firm shall be required to undertake license as per Section 12 of contract (Regulation and abolition) Act,1970. In such a situation, the concerned department where the manpower will be deputed will get registration as Principal Employer under Section 7 of contract (Regulation and abolition).

35. **Insurance**:-

35.1 General In this Sub-Clause, "insuring Party" means, for each type of Requirements insurance, the Party responsible for effecting and maintaining the for Insurance insurance specified in the relevant Sub-Clause. Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Procuring Entity. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause. Wherever the Procuring Entity is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause. If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Procuring

Entity shall act for Procuring Entity's Personnel, (ii) additional joint

insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The relevant insuring Party shall, within the respective periods stated in the Contract Data (calculated from the Commencement Date), submit to the other Party:

- i. evidence that the insurances described in this Clause have been effected, and
- ii. Copies of the policies for the insurances described in Sub-Clause 35.2 [Insurance for Works and Contractor's Equipment] and Sub-Clause 35.3 [Insurance against Injury to Persons and Damage to Property].

When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the representative of RSGSM.

Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Sub-Clause.

Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.

If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.

Nothing in this Sub-Clause limits the obligations, liabilities or responsibilities of the Contractor or the Procuring Entity, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/ or the Procuring Entity in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

Works and Contractor's reinstatement Cos of debris and profese effective from the		The insuring Party shall insure the Works, Plant, Materials and Contractor's Documents for not less than the full reinstatement Cost including the Costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under Sub-Clause 35.1 [General Requirements for Insurances].
		The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations including those under Defect Liability.
		The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.
		Unless otherwise stated in the Special Conditions, insurances under this Sub-Clause:
		i. shall be effected and maintained by the Contractor as insuring Party,
		ii. shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated to the Party actually bearing the Costs of rectifying the loss or damage,
		iii. shall be extended to cover liability for all loss and damage from any cause.
		iv. shall also cover, to the extent specifically required in the Contract Data, loss or damage to a part of the Works which is attributable to the use or occupation by the Procuring Entity of another part of the Works, and loss or damage from the risks, excluding (in each case) risks which are not insurable at commercially reasonable terms, and
		v. may however exclude loss of, damage to, and reinstatement of:
		 (a) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub- paragraph (b) below),
		(b) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, material or

		workmanship, and
		(c) A part of the Works which has been taken over by the Procuring Entity, except to the extent that the Contractor is liable for the loss or damage.
Insurance against Injury to Persons and Damage to Property	35.3	The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 35.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 35.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate. This insurance shall be for a limit per occurrence of not less than the amount stated in the Contract Data with no limit on the number of occurrences. Unless otherwise stated in the Special Conditions, the insurances specified in this Sub-Clause:
		i. shall be effected and maintained by the Contractor as insuring Party,ii. shall be in the joint names of the Parties,
		iii. shall be extended to cover liability for all loss and damage to the Procuring Entity's property (except things insured under Sub-Clause 35.2 [Insurance for Works and Contractor's Equipment] arising out of the Contractor's performance of the Contract, and
		iv. may however exclude liability to the extent that it arises from:
		(a) the Procuring Entity's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,
		(b) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any Defects, and
		(c) a cause listed in Procuring Entity's Risks, except to the extent that cover is available at commercially reasonable terms.
Insurance for Contractor's Personnel	35.4	The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.
		The insurance shall cover the Procuring Entity and the Engineer-in- charge against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Procuring Entity or of the Procuring Entity's

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Personnel.
The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Sub-Clause.

36. RTTP Act 2012/ Rules 2013 will be part of the this project.

Section VI B: Contract Data / Special Conditions of Contract

Ref. to GCC	Subject	Data
1.1	Procuring Entity's designation and address are:	Rajasthan State Ganganagar Sugar Mills Ltd. Address: 3rd Floor, Centre of Excellence for Revenue Research & Analysis, Jhalana dungari, Jaipur, Rajasthan
	Representative Designation & Address	GENERAL MANAGER Address: 3rd Floor, Centre of Excellence for Revenue Research & Analysis, Jhalana dungari, Jaipur, Rajasthan Website:- excise.rajasthan.gov.in Email Id:-itcell.rsgsm@rajasthan.gov.in
	The Name of Work is:	Design, construction, supplying, setting up, implementation of the required instruments & integration with PLC/DCS based SCADA / IoT system in 08 bottling Units of RSGSM, Situated at various locations in Rajasthan including 5 years O&M on TURNKEY basis for collection, processing & transmission on real time spirit data
	The Site is:	Project area includes RSGSM 8 no's Bottling units (RCs)- Package-1(Jaipur, Bhilwara, Hanumangarh & Alwar) & Package-2 (Ajmer, Jodhpur, Kota, Udaipur) of Rajasthan.
	Designated representative	Designated representative will be decided by the procuring entity at the time of purchase order or before start the work.
	Defect Liability Period (DLP)/ Defect Notification Period (DNP) is	DLP period shall be one year after completion of the work and successful UAT/ trail run. During the DLP period bidder shall provide the required manpower, required H/w, S/w, consumables, rectification of defects and errors/ bugs etc upto system run satisfactorily.
	The Time for Completion and the Intended Completion Date are:	 Total Project Time-line:- Project should be complete in all respect. Part A:- Survey, design, supply, Installation testing (SIT), commissioning, successful UAT/trail run of the Instrumentation, automation & SCADA/IoT software work including civil, mechanical & electrical work shall be completed within 10 months (300 days) from the date of purchase order. Part B:- This period shall be 6 years (First year Defects Liability Period (DLP) + 5 year O&M) after completion of the part A.
	The Department is:	Rajasthan State Ganganagar Sugar Mills Ltd.
1.3	Communication:	Electronic transmission shall include e-mail etc. and delivered shall include their transmission sent successfully to correct address.
1.4	The Language of the Contract is:	English

	an State Ganganagar	
1.8.1	Signing of the Contract Agreement:	Within 15 Days of issue of letter of acceptance (LOA). The agreementshall be signed with RSGSM, Jaipur.
1.14	Care and Supply of documents	The bidder shall maintain standard Site Order Books, log book, prepare and updated user manual, design and drawing, P&ID and other necessary documents at the Site at all times during the execution of the Works. The designated representative of RSGSM shall retain the original copy of the site documents, while the bidder shall retain the duplicate ones.
3.2A	Role of Consultant Appointed by RSGSM	The Consultant appointed by RSGSM shall carried out task to be decided & assigned by RSGSM.
4.1.5	Requirement of designing by the Bidder.	All designs, drawings of this work are as per format approved by designated representative of RSGSM, reports preparation & documentation, calibration ,specification and etc required to design the project components and up to commissioning up to desired parameters/norms/specifications shall be done by the bidder at his own cost up to satisfaction of designated representative of RSGSM.
		Prior to commencement of the Tests on Completion, the bidder shall prepare, and submit the operation and maintenance manuals, as built design and drawings in soft copy with formulas, specification of all project components, guarantee/warrantee of project components and control philosophy of complete project etc in accordance with the Procuring Entity's Requirements and in sufficient detail for the Procuring Entity to calibrate, operate, maintain, dismantle, reassemble, adjust and repair the Works. The Works shall not be considered completed for the purposes of taking-over until such operation and maintenance manuals, control philosophy, as built designs and drawing, guarantee of equipment vendors etc have been submitted to the designated representative of RSGSM for the entire system.
4.3.1	Performance Security	Performance Security amounting to total 5% of contract value shall be submitted as follows: (i) Bidder shall submit Performance Security @ 5% in advance at the time of signing of agreement in form of BG as per latest rules under RTPP act. The BG should be issued by any nationalized / schedule bank and shall remain valid up to 90 days beyond satisfactorily O&M period. Bank Guarantee submitted against the performance guarantee, shall be unconditional and encashable/invokable at the Jaipur when presented in specified Branch Office. (ii) The Performance Security shall be submitted for the value 5% of the Contract amount of the work (iii) If there is no reason to retain the Performance Security, it shall be returned back to the bidder within 90 days after the satisfactory completion of the O&M period.
4.3.5	Refund of Performance Security	shall be refunded within 90 days after the satisfactory completion of the O&M period as per clause 4.3.1 (iii) above.
4.9.1	Third Party Audit & QualityInspections	RSGSM appoint third party for audit and quality inspection (if required) for improve and maintain the quality during execution of the contract.

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4.18	Cost of internet, water & electricity	Charges for electricity, water and internet connection shall be in scope of RSGSM.			
6.3.1	Employment of Technical Staff and other Employees	The list of technical staff and personnel required package wise during the DLP period and 5 years O&M period is mentioned in Clause 22 of this Section.			
	Zimproyees	Bidder shall replace manpower, if not satisfactory performance, bidder have to change manpower within 15 days from the date of notice of PE, otherwise penalty will be applicable as per below table.			
	In case the bidder does not engage the staff as specified in section, the amount shall deduct amounts from running bill indicated below and shall engage staff on his own.			amounts from running bills as	
		S.No	Position required	Salary to be deducted if not engaged by bidder	
		1.	Project/ Plant Manager.	Rs. 2500/- per day	
		2.	Project / Plant Supervisor/ Engineer	Rs. 1500/- per day	
		3.	Periodic Maintenance Specialist	Rs. 15000/- per visit. Minimum 8 visits are mandatory per year & whenever required by RSGSM	
		4.	Technical Assistant	Rs. 650/- per day	
6.7	The normal working hours at the Site and Days	As per tir	ning of RSGSM's Reduction o	centre(shift wise + normal).	

	of rest shall be:	However, when work is stopped, it should be ensured by the bidder that all safety measures have been taken to avoid anyuntoward incident during non-working hours.		
7.3	Inspection Inspection of equipments shall be carried out at sit representative or third party appointed by RSGSM. submit the detailed designs (if required) and designated representative or third party appointed by			
		The Bidder shall inform about receipt of project components at site.		
		INSPECTION CATEGORY		
		S Item No	Category of inspection	
		Complete Metering Skid including mass flow meter, Air eliminator, Pressure transmitter, Temperature Controller, on off control valve, radar type level transmitter, vortex Flow Meter, Mass flow meter, Density Meter, Water analyzer with PH Meter, TDS	А	
		Meter, Electrical and automation Panels /PLC-SCADA, IoT system etc		
		Pump and motors, SS Pipeline ,all types Cables, Surveillance equipments, server, PC,UPS, air conditioner etc.	В	
		3 Cable trays, earthling, pipes etc.	С	
		If equipment not found satisfactory according to spinspection, Bidder have to change equipment within		
		Note:-If any item not covered in above table then in shall be decided by the designated representative time of approval of design, drawings and specification	of RSGSM at the	
7.9.1		All types of tests and calibrations etc required to execute or optimized the project components shall be executed by the bidder from the laboratory specified as per direction of designated representative of RSGSM, no additional payment shall be made for the same.		
8.5	Activity Programme	The Bidder shall submit a detailed execution time programme on MS excel/ Project or other similar software to the RSGSM within 7 Days after signing of agreement. The Bidder shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Bidder's obligations. Each programme shall be revised every month and shall include the order in which the Bidder intends to carry out the Works, including the anticipated timing of each stage of design (if any), drawings, Bidder's Documents, procurement, manufacture of Plant, delivery to Site, construction of works, erection and testing etc.		

8.6,	Extension	of for	Extension of time Rate of progress of work, Liquidity Damages for each unit location of package shall be considered separately based on reason of delays in the work pertaining to that package unit, If designated representative of RSGSM seem requirement.
8.9	Liquidated Damage		Liquidated Damages:- (i) If the contractor fails to execute the order/contract within the period specified in the bid, and if such failure have arisen from, any unforeseen cause such as strike, fire, accident, any natural calamity resulting in stoppage of work in the factory, of the manufacturer or similar reasons which the Director In charge of RSGSM Ltd. may feel valid for an extension of the time, may extend the period without charging any liquidated damages. His decision shall be final regarding the sufficiency or otherwise for extension of time. (ii) If the bidder fails to execute the order within the period specified in the bid, the Director In charge of RSGSM Ltd may at his discretion may allow extension of time subject to recovery from the bidder as liquidated damages with 18% GST and not by way of penalty, a sum equal to the following percentage of the value of goods which the bidder has failed to supply for the period of delay as stated below:- a) Delay up to one fourth period of the prescribed delivery period - 2.5% + 18% GST b) Delay exceeding one fourth but not exceeding half of prescribed delivery period - 5% + 18% GST c) Delay exceeding half but not exceeding three fourth of the prescribed delivery period - 7.5% + 18% GST d) Delay exceeding three fourth but not exceeds the period equal to the prescribed delivery period - 10% + 18% GST
			Notes:- i. Fraction of a day in reckoning the period of delay in supply shall be eliminated if it is less than half a day. ii. The maximum amount of liquidated damages shall be 10%. iii. When the successful bidder is unable to complete the order/contract within the specified or extended period, the company shall be entitled to accept supply from the open market without giving any notice to the bidder but at his risk and cost i.e. bidder's account and risk the goods or any part thereof which the bidder has failed to supply or if not available the best and nearest available substitute thereof or to cancel the contract and the bidder shall be liable for any loss or damage which the company sustained by reason of such failure on the part of the bidder. But the bidder shall not be entitled to any gain on such purchase made against default. The recovery of such damage shall be made from any sum accruing to the bidder under this or any other contract with the company. If recovery is not possible from the bills and the bidder fails to pay the loss or damage within one month, the recovery shall be made under any law for the time being in force or from any other bills outstanding with the company. iv. If the supplier requires an extension of time in completion

(Rajasth	an State Ganganagar			
		of contractual supply on account of och hindrance, he shall apply in writing to the has placed the supply order, for the same occurrence of the hindrance but not after date of completion of supply. v. Delivery period may be extended verify liquidated damages if the delay in the supply on account of hindrances beyond the contraction.	e authority, which e immediately on er the stipulated with or without upply of goods is	
8.10	Suspension of work	Suspension of work and other related clauses to considered separately.	each unit shall be	
8.11	Consequences of suspension	Suspension of work and other related clauses to considered separately.	each unit shall be	
8.12	Payment for Plant/instruments and Materials in Event of Suspension	Suspension of work and other related clauses to each unit shall be considered separately.		
8.13	Prolonged suspension	Suspension of work and other related clauses to considered separately.	each unit shall be	
8.14	Resumption of Work	Suspension of work and other related clauses to each unit shall considered separately.		
8.15	Work to be executed strictly as per specification	All specifications, designs, norms and drawings of tender document shall be considered as indicative and in case any specifications, design, norms are equipments or structures or process etc have not document, However design, drawing and specific components can be upgraded or modified or adder for optimization of system, as per prevailing a international standards or practices as per direct representative of RSGSM. No additional payment the same.	e and minimum only and drawings etc of mentioned in tender cation of all project ed (if not mentioned) updated national or	
9.0	Deviations Variations Adjustments In case any addition or variations in the instrument, quantities, size and nos mentioned in Table:- SCOPE OF WORK of Section-V no expayment shall be paid by the RSGSM. Before quoting the prices said work, all prominent bidder are advice to visit and check the activities of installation.		of Section-V no extra uoting the prices for and check the actual	
15.3	Project timeline	Project timeline:- The bidder is required to meet the with the scope of work & Project shall be complete in resp		
		Task to be carried out	Timeline from PO Date (In days)	
		Survey, study & investigation, Data Collection, Control Philosophy, reports & documentation, Detail Design & Drawings of Project Components Including Civil, Mechanical, Electrical and Instrumentation/Automation and approval by MNIT.	45	
		Civil Work	90	
		Supply, Installation testing (SIT) & commissioning of Instrumentation, automation of the existing process & SCADA/IoT software work including mechanical & electrical work	280	

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		UAT/Trail	300
		Total	
		Note:-03 consecutive working days shall be considered with accurate transfer of blend qty (in BL) for production	
15.4	Payments	Payment schedule and breakup:-	
15.4	Schedule	Task to be carried out	% Breakup of 60% quoted amount by bidder (except 40% O&M cost).
		Survey, study & investigation, Data Collection, Control Philosophy, reports & documentation, Detail Design & Drawings of Project Components Including Civil, Mechanical, Electrical and Instrumentation/Automation and approval by MNIT.	5.0%
		Civil Work	3.0%
		Supply, Installation testing (SIT) & commissioning of Instrumentation, automation of the existing process & SCADA/IoT software work including mechanical & electrical work	62.0%
		UAT/Trail	30.0%
		Total	100.00%
		 During the DLP period no payment run the system satisfactory for pro- created under this contract. 	
20	Insurance	The details of Insurance covers to be obtained to their value, terms and extent of coverage conditions shall be as under:	
		The minimum amount of Third Party Liability inso Rs 20,00,000 (Rupees Twenty Lakhs only) per with the number of occurrences not less than for promptly notify the Project Manager of each cl Third Party Liability coverage, and shall ren Insurance after each such occurrence in order	occurrence or event, our. The Bidder shall aim made under the ew the Third Party
		number of covered occurrences at not less than	
		number of covered occurrences at not less than the minimum coverage against damage to the during construction shall be Rs. 25,00,000 (Find Lakhs only).	four. Works and materials

22	Personnel (For this contract of RSGSM, Jaipur)	Manpower during execution of period:-Bidder shall engage required manpower according to his during execution period and up to successful UAT/trail.				
		per	sonnel to be	DLP+ O&M pengaged durin DLP for the pro	g 1 year DL	P+5 yearsO&M
		S.N o	Position required	Educational Qualificatio Ns	Experience on similar work years/ Nos.	No of personnel required
		1.	Project/ Plant Manager.	Graduate in Engineering + desirable: Project management qualifications	10 years Experience	1 nos for one package (4 RC) so total P.M – 02 nos
		2	Project/ Plant Supervisor.	Graduate in engineering	3 years	1 nos for each location so total P.S- 08nos
		3.	Technical Assistant	ITI/ Diploma	-do-5 years	1 nos for each location so total T.A- 08nos
		4.	Periodic Maintenance Specialist	Graduate in respective Engineering	do-5 years	Minimum 8 number of visits per year per RC or as Per requirement of RSGSM
	*During the DLP period no payment shall be made against manpower. ** Laptop/computer/printer/table-chair etc and other accessory required to carry out the work at site shall be provide by the bid			her accessory		
		without any additional cost. Roll & Duties:- The following task to be carried out by the deputed manpower but not limited to the following activities:- Contractor shall provide services of an manpower having required qualification & experience at respective site offices. The site Supervisor /engineer/ technical assistant should have sufficient experience of working upon and troubleshooting with the				

(Kajastna	an State Ganganagar	equipment & software installed. He should ensure the receipt of data, consumables items and will validate the data on weekly basis to the respective rc, so as to ensure the receipt of data on regular basis. 1. Project Manager:- One project manager shall be deputed for one package. Project manager shall be responsible for overall activities of respective package. Supervising, site visit, implementation, trouble shooting, coordination and overall monitoring of process. He will attend departmental meetings. He will report to Dy. Dir. (IT), Head office. He will be bidder's authorized representative for the respective package. 2. Plant Supervisor:- Design and drawings and overall management and ensure quality control during installation which shall be done as per approved design and drawing including explain/presentation as and when required by designated representative of RSGSM about the instrumentation, getting approvals of P&ID, coordination and monitoring to ensure complete project in time and up to commissioning. He will be Bidder's authorized representative at the Site. Carry out all the operational and maintained the activities at site. Control troubleshooting and monitoring the complete SCADA/IoT system at site and push the real time data to Main excise server. Coordination with RC smooth production process and other related activities. 3. Technical Assistant:- Work under Plant supervisor for general operating, configuration and maintenance of Instruments/ equipments and software under this contract. Operate & control the SCADA/IoT system. 4. Periodic Maintenance specific areas Specialist:- For Design and drawings and overall instrumentation and software/hardware calibration shall be done as per approved design and drawing including explain/presentation as and when required by
		experience etc engineer.
23		All items shall be BIS/ISI Marked for which BIS is available.
4	operation	 In case of production is hampered of unit due to any failure in the project components for 01 hrs duration. A minimum penalty of Rs 10000/- per hour. In case of specified data is not transferred to central server due to any failure (under the bidder scope) in the project components for 01 hrs duration. A minimum penalty of Rs 2000/- per hour. In case of variation of reading is more than the specified accuracy in this contract document, per reading, a minimum penalty of Rs. 2000/- per reading will be imposed and same shall be deducted from monthly bills.
25	Compliance of Land border clause	Contractor and OEM should comply the Rule 13 of the Rajasthan Transparency in Public (RTTP) Rules, 2013 and Government of Rajasthan Notification No. F.2(1) FD/G&T SPFC/2017 dated 01.01.2021,15.01.2021 and 30.03.2021 regarding prior registration with Industries Department for bidders with beneficial ownership from countries sharing land border with India, for participation in any public procurement in the State. Documents proof should submit along with Bid (if required).
DCCCM I	inur (Rajaethan)	

SECTION VI B1

SPECIAL CONDITIONS OF CONTRACT -O&M

(Project components to be created under this contract)

1. GENERAL REQUIREMENTS FOR OPERATION AND MAINTENANCE

- a. The total O&M period shall be 05 years. First year after completion of the project and issue of completion certificate shall be considered the Defects Liability Period (DLP). During the DLP no payment is to be made to bidder. After completion of DLP period O&M charges include all expenditures and expenses required to be incurred on Verification/Calibration of Mass flow meter, Replacement of parts, Replacement of PH sensor, Periodic maintenance specialists visits etc., labour, instruments, PLC-SCADA, IoT system, software's, hardware's and machinery deployed, repair and/or replacement of all components mentioned in procurement entity requirement (section-V), preventive and/or breakdown maintenance including cost of instrumentation, materials, equipment/machinery, consumable items, chemicals, fuel, water and all other matters and things of what so ever nature essential and desirable to run the system satisfactorily. Power charges and internet charges shall be paid by the RSGSM for the complete project. The annual / yearly charges during 5 years O&M of all components created under the Contract shall be quoted by bidder in BoQ...
- b. The Bidder shall operate and maintain the project components for operation and maintenance period including DLP. All necessary repairs, maintenance, overhaul, replacements etc., shall be made during the O & M and DLP to maintain the project components. At the end of O & M period the project components shall be handed over to the Procuring Entity in fully functional-condition.

The price for O & M bill shall include, supply of all tools & tackles, calibration, spares, lubricants etc. The scope shall include but not limited to the following items.

- i. Operation and Maintenance including all instrumentation and online data transfer, control and monitoring and allied works etc
- Operation and maintenance cost includes Verification/Calibration of Mass flow meter per year , Replacement of parts, Replacement of PH sensor per year , Periodic maintenance specialists visits etc. during O&M period and DLP Period.
- iii. In case of production is hampered of unit due to any failure in the project components for 1hrs duration, a minimum penalty of Rs 10,000/-(Ten thousand only) per hour will be imposed and same shall be deducted from RA bill. In case failure in the project components beyond control of bidder then no penalty will be applicable.
- iv. In case specified data is not transferred to central server due to any failure in the project components for 1hrs duration, a minimum penalty of Rs 2000/-(Two Thousand only) per hour will be imposed and same shall be deducted from monthly bill. In case failure in the project components beyond control of bidder then no penalty will be applicable.
- v. In case of variation of reading is more than the specified accuracy in this contract document, per reading, a minimum penalty of Rs 2000/-(Two thousand only) per reading will be imposed and same shall be deducted from

- monthly bill. In case incorrect reading in the project components beyond control of bidder then no penalty will be applicable.
- vi. Maintenance of parameters monitored by the PLC/DCS-SCADA/IoT shall be continuous on real time basis and shall be got approved by the Procuring Entity's representative. These reports shall contain sufficient appropriate and adequate data to make the records meaningful and amenable to analysis for evaluating the performance of the unit components as well as to help in O & M management decisions.
- vii. The records maintained by the Bidder shall be produced periodically to the Procuring Entity's representative for proper monitoring. The Procuring Entity's representative's remarks shall be attended to on next submission. Consolidated summary reports shall be furnished to the Procuring Entity monthly, quarterly and yearly containing salient features.
 - a. The Bidder shall also maintain history sheets of overhauling, maintenance, calibration. replacement of project components.
 - b. The O & M shall include the appropriate preventive maintenance of project components as per the manufacturer's recommendation.
 - c. The operation, maintenance and repairs services shall be performed.
- viii. After commissioning of project, bidder has to submit control philosophy of project, operation manuals of project, manufactures contact details and guarantee or warrantee of all equipment provided by vendor and software with required licenses or permissions to run the software on portal but not limited to.
 - ix. Operation of the project components as per O & M Manual and shall be operated according to the rules and procedures laid down in the approved O & M manual.
- x. The Bidder and his staff shall maintain a high degree of awareness in operation and maintenance of the Project components and all relevant safety codes and procedures. At all times the project components, its equipment shall be kept clean.
- xi. The preventive maintenance shall be carried out according to the preventive maintenance schedule of the project components. The regular staff may be reinforced with short-term specialists by the Bidder for special maintenance tasks, after duly informing the Procuring Entity's representative of the need and the schedule.
- xii. Repairs shall be made as and when needed very promptly on the spot or at the Bidder's / Manufacturer's workshop. The need of repair on the spot or at the Bidder's workshop has to be defined in co-ordination with the Procuring Entity's representative and according to the status of spare parts availability.
- xiii. The Bidder shall keep a reasonable stock of spare parts so that the down time of equipment can be kept within the limits. The contents of the stock and the reorder level of the inventory have to be approved by the Procuring Entity's representative.
- xiv. All necessary transportation etc for operation and maintenance and execution of project shall be arranged and made by the Bidder at his own expense.
- xv. Calibration of instruments

Bidder will perform measurement and calibration of all installed instruments (mass flow meter, radar type level transmitter etc.) as per requirement and guidelines of instrument manufacturer during DLP and O&M Period. In case of any dispute for instruments reading/measurement, bidder has to provide onsite weigh and measure certified equipments and other required accessories to perform the measurement/reading at site in the presence of RSGSM designated representative, Client and other nominated authority.

- xvi. The Bidder shall operate and maintain the all project components under this contract for the period specified in this contract which shall be extendable for a further period of five years as per mutual agreement between bidder and Procuring Entity's.
- xvii. O&M period can be extended after completion of 5 years period as per mutual agreement between RSGSM and bidder, Maximum 5% shall be increased of total basic amount of O&M period, shall be applicable for extended year subject to agreement of RSGSM and bidder.
- xviii. The Bidder will submit a detailed operation and maintenance plan forapproval of Procuring Entity's representative. All operation and maintenance activities shall be carried out strictly in accordance with the approved plan.
- xix. The Bidder shall operate and utilize the control and monitoring systems. If found necessary, he shall adjust (within the operation range) of the control system and equipment, so that the project components operation matches the system requirements.
- xx. If it is determined that the facility is not capable of meeting the design parameters for any reason beyond the Bidder's control and not attributable to him, the Bidder shall determine the specific cause of failure/ abnormality in the project components functioning and report to the Procuring Entity's representative and seek his directives on the necessary corrective action to be taken/adopted.
- xxi. The Bidder shall provide technical personnel to operate and maintain the project components and works properly, safely and efficiently for the full term of the DLP and O & M period. While doing so due consideration shall be given to the labor laws in force.
- xxii. The Bidder shall be responsible for safety of his staff during execution of work, DLP and O&M of the project components and shall procure, provide and maintain all safety equipment necessary for satisfactory O&M such as gasmasks, gloves, boots, mats etc.,
 - a. The Bidder shall utilize safety awareness procedures in every element of operation and maintenance.
 - b. The Bidder shall emphasize site safety including adoption of Safeworking procedures
 - c. Cleanliness and care of the project components as a whole.
 - d. Accident and hazardous conditions prevention and reporting.
 - e. Safe practice while working near spirit holder areas.
 - f. The Bidder shall notify the Procuring Entity's representative immediately if any accident occurs whether on-site or off site in which Bidder is directly involved or not involved and results in any injury to any person, whether directly concerned with the site or a third party. Such initial notification may be verbal and shall be followed comprehensive report within 24 hours of the accident.

TAXES AND DUTIES

The Bidder shall be responsible for paying all taxes/duties/cess etc or any other levies imposed by the Government and assessed as due and payable by the Bidder associated with the carrying out of the services. Howeverfor O&M charges GST will be paid extra as applicable rates. Notwithstanding the provisions of any Clause of this Conditions of Contract for Operation and Maintenance, the RSGSM, Jaipur shall be entitled to withhold or deduct from payment to the Bidder any amount demanded by the competent authority.

All statutory deductions shall be made from all the payments done to the bidder.

RSGSM RIGHTS

Inspection

The RSGSM, Jaipur may periodically check the operation of the Facility or designate an organization of its choice at the cost of RSGSM, Jaipur to carry out inspections of the Facility to satisfy itself that the Bidder is performing its obligations with due diligence.

The Bidder at its own cost shall provide any assistance required for such inspection of the Facility.

The RSGSM, Jaipur representative can inspect the facility at any moment during the DLP and O&M period.

2. TERMINATION

BIDDER'S DEFAULT

The RSGSM, Jaipur shall be entitled to terminate this Contract for the following reasons attributable to the Bidder, unless arising as a result of a Force Majeure Event, or any cause related to the obligations of the RSGSM, Jaipur.

- a) Repudiation of this Contract by the Bidder or the evidencing of an intention by the Bidder not to be bound by the terms of this Contract.
- b) Appointment of a provisional liquidator in providing for winding up of the Bidder unless such appointment has been set-aside within 45 days.
- c) The Bidder is ordered to be wound up by a court or files a petition for voluntary winding up except for the purpose of amalgamation or reconstruction provided that such amalgamation or reconstruction does not adversely affect the ability of the amalgamated or reconstructed entity to perform its obligations under this Contract, the successor has assumed in writing unconditional responsibility for the performance of the Bidder's obligations and the technical, financial and operating capability of the successor is satisfactory to the RSGSM, Jaipur.
- d) The Bidder abandons the operation of the Facility.
- e) Under conditions expressly mentioned in any Clause of this Conditions of Contract for Operation and Maintenance.

CONSEQUENCES OF TERMINATION BY RSGSM, JAIPUR

If the RSGSM, Jaipur, with reasonable grounds, terminates the contract under clause of contract, the Secured Advances, and any other sums of the bidder with the RSGSM, Jaipur, shall be fortified and action shall be taken against him as per General Conditions of Contract, if deemed appropriate.

3. INDEMNIFICATION

The Bidder to indemnify the RSGSM, Jaipur against the following:

- (a) The Bidder shall at its own expense make good any physical loss or damage to the Facility occasioned by it in the course of the performance of its obligations under this Contract if and to the extent such loss or damage is caused by the willful misconduct or failure to follow Good Engineering Practices of the Bidder, any sub-bidder or their respective agents or employees.
- (b) The Bidder shall indemnify, defend and hold harmless the RSGSM, Jaipur and its officers, employees, agents and affiliates against any and all claims of loss, damage and expense of whatever kind and nature, including all related costs and expenses incurred in connection therewith, in respect of personal injury to or death of third parties and in respect of loss of or damage to any third party to the extent that the same arises out of:
 - (i). Any breach by the Bidder of its obligations hereunder;
 - (ii). Any negligent act or omission on the part of the Bidder, its subbidders or their respective agents or employees; and
 - (iii). Any willful misconduct or breach of statutory duty on the part of the Bidder, its subbidders or their respective agents and employees.
 - (iv). Any other event where such indemnification has been expressly mentioned in this Conditions of Contract for Operation and Maintenance.
- (c) The Bidder shall indemnify, defend and hold harmless the RSGSM, Jaipur and its, officers, employees, agents and affiliates against any and all claims of loss, damage and expense of whatever kind and nature, including all related costs and expenses incurred in connection therewith in respect of the death or injury to any person employed by the Bidder or its subbidders in connection with the performance of the Bidder's obligations.

The Bidder shall indemnify the RSGSM, Jaipur against all losses and claims in respect of:

- (a) Death of or injury to any person, or,
- (b) Loss of or damage to any property (other than the Works).

Which may arise out of / in consequence of the Operation and Maintenance of the Facility and the remedying of any defects therein, and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exceptions below

(i). The permanent use or occupation of land by the Facility, or any part thereof.

- (ii). The right of the RSGSM, Jaipur to execute the Facility, or any part thereof, on, over, under, in or through any land.
- (iii). Damage to property that is the unavoidable result of the execution and completion of the Works, or the remedying of any defects therein, in accordance with the contract.

4. INTELLECTUAL PROPERTY

All Intellectual Property conceived, originated, devised, developed or created by the Bidder specifically for the Facility or the carrying out of the obligations under this Contract shall vest in the RSGSM, Jaipur as sole beneficial owner and shall be disclosed to the RSGSM, Jaipur upon its [the Intellectual Properties] coming into existence.

Computer programs and associated documentation, storage media shall be made available to the RSGSM, Jaipur by the Bidder free of cost

Any Intellectual Property of the RSGSM, Jaipur that is required in connection with the performance of the obligations of the Bidder shall be made available to the Bidder free of charge for the purposes of thisContract alone

The Bidder shall, at its own cost and expense, ensure availability at all times during the Term of this Conditions of Contract for Operation and Maintenance, of any proprietary spares/consumables/equipment that it may have sourced for purposes of ensuring proper functioning of the Facility as per this Conditions of Contract for Operation and Maintenance.

The Bidder shall, as far as practicable, use its best efforts

- (a) To procure that Intellectual Property owned or developed by third parties and utilized by the Bidder in connection with the performance of its obligations under this Contract for the production of treated water from the Facility and otherwise for the Facility but for no other purpose on reasonable terms
- (b) To ensure that no Intellectual Property of a third party is otherwise used in the performance of the Bidder's obligations under this Contract without the approval from the RSGSM, Jaipur.

On Termination of this Conditions of Contract for Operation and Maintenance, the Bidder shall transfer all such Intellectual Property whatsoever to the RSGSM, Jaipur and/or to the Successor Operator at the discretion of the RSGSM, Jaipur.

Annexure A: Compliance with the Code of Integrity and No Conflict of Interest

Any person participating in a procurement process shall -

- (a) not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (b) not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (c) not indulge in any collusion, Bid rigging or anti-competitive behavior to impair the transparency, fairness and progress of the procurement process;
- (d) not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
- (e) not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) not obstruct any investigation or audit of a procurement process;
- (g) disclose conflict of interest, if any; and
- (h) disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of Interest:-

The Bidder participating in a bidding process must not have a Conflict of Interest.

A Conflict of Interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

- i. A Bidder may be considered to be in Conflict of Interest with one or more parties in a bidding process if, including but not limited to:
 - a. have controlling partners/ shareholders in common; or
 - b. receive or have received any direct or indirect subsidy from any of them; or
 - c. have the same legal representative for purposes of the Bid; or
 - d. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding the bidding process; or
 - e. the Bidder participates in more than one Bid in a bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one Bid; or
 - f. the Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid; or
 - g. Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as engineer-in-charge/ consultant for the contract.

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Annexure -B

SELF-DECLARATION - NO BLACKLISTING

(On the Letter head of the bidder firm)

datedfor
, at the time of bidding,
rupt & fraudulent practices either overnment/ PSU/UT.
any other action that may be taken,
oted, may be cancelled.

1. Letter of Intent

Letter of Intent

[on letterhead paper of the RSGSM]

No
To: [name and address of the Bidder]
Subject: [Notification of Award for the Works]
This is to notify you that your Bid dated [Date] For execution of the
Authorized Signature:
Name and Title of Signatory: General Manager, RSGSM, Jaipur
Designation:

4A. Performance Security

Performance Security
[Bank's Name and Address of Issuing Branch or Office]
Beneficiary: GENERAL MANAGER, RSGSM, Jaipur Date:
Performance Guarantee No.:
We have been informed that [name of the Bidder]
Furthermore, we understand that, according to the conditions of the Contract, a performance security is required.
At the request of the Bidder, we [name of the Bank]
The Guarantor agrees to extend this guarantee for a specified period in response to the Procuring Entity's written request for such extension for that specified period, provided that such request is presented to the Guarantor before the expiry of the guarantee.
This guarantee shall expire, no later than the Day of ,

Notes: 1. all italicized text is for guidance on how to prepare this advance paymentguarantee and shall be deleted from the final

2.the Procuring Entity should note that in the event of an extension of the time for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

Seal of Bank and Authorized Signature(s)

* The Guarantor shall insert an amount representing the percentage of the ContractPrice specified in the Contract

^{**} Insert the date sixty days after the expected completion date, including defectliability period and maintenance period, if any.

Annexure-H

Name and location or Reduction centre of RSGSM

Туре	S.No.	Name of R.C.	Address
	01.	Jaipur	Rajasthan State Ganganagar Sugar Mills Ltd., Near Dehar Ke Balaji Railwar Station, Jhotwara, Jaipur - 302012
Project 1	02.	Bhilwara	Rajasthan State Ganganagar Sugar Mills Ltd., E-28A-282, Growth Centre, Hamirgarh Bhilwara - 311025
	03.	Hanumangarh	Rajasthan State Ganganagar Sugar Mills Ltd. Plot No. SP-5A-B, RIICO Industrial Area Phase II, Hanumangarh Junction - 335512
	04.	Alwar	Rajasthan State Ganganagar Sugar Mills Ltd. Opposite NDD, E-617, M.I.A. Alwar - 301030
	05.	Ajmer	Rajasthan State Ganganagar Sugar Mills Ltd. Taragarh Road,Ramganj, Ajmer - 3050041
Project 2	06.	Jodhpur	Rajasthan State Ganganagar Sugar Mills Ltd. Near Railway Station, Mandore, Jodhpur - 342304
	07.	Udaipur	Rajasthan State Ganganagar Sugar Mills Ltd. Udai Sagar Road, Opposite United Spirit RIICO Madri, Udaipur - 313001
	08.	Kota	Rajasthan State Ganganagar Sugar Mills Ltd. SPL-1, Kuber Industrial Area, RIICO, Ranpur, Kota - 325003