(24" O.D x 0.375"W.T)

PRE-COATED LINEPIPE

FOB/C&F & FOR (Only for Local Manufacturers SRO 827(1)/2001)

Bids are to be invited from manufacturers and suppliers having valid API 5L certification (for Steel Line pipe) and API Specs Q1/API QR/API QMS (for 3LPE external Coating Application) along with ISO 9001, ISO 14001 & ISO 45001 Certifications.

Bids are to be invited on Single Stage Two Envelope Bidding Procedure
Under PPRA Rules 2026, Rule# 27 (b)

TENDER ENQUIRY NO: SSGC/FP/PT/EPADS-1/14560

Bid Closing date & time: 17-12-2026 at 1530 Hrs.
Bid Opening date & time: 17-12-2026 at 1600 Hrs.

Fixed Bid Security; USD=7,200 OR PKR=2,000,000.

Note: The bidder is required to submit/upload the Valid PEC Certificate mentioned in the Tender Document/Advertisement (where required) along with the Bid on EPADS-v1.0 else the bid will be liable for rejection. This tender is available on the EPADS-v1.0 link: https://eprocure.gov.pk/#/auth/login. Bidders/suppliers/contractors should participate in this tender through EPADS-v1.0. Supplier should download tender document through EPADS-v1.0, fill BOQ/ Bid form/ schedule of requirement and upload all tender documents with sign and stamp through EPADS-v1.0 otherwise bid will be treated as rejected. The bidder must deposit/submit the physical fixed bid bond to the Tender Room (SSGC HO) before the bid submission date & time, otherwise the bid will be liable to be rejected.

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

Venue:
Tender Room, CRD Building, Ground Floor
SSGC Head office complex Karachi -75300
Ph.99021024 – 99021173 - 99021116.

Sui Southern Gas Company Limited

Procurement Department, 2nd Floor, ST-4/B, Block-14, Sir Shah Suleman Road, Gulshan-e-Iqbal, Karachi-Pakistan. Phone: 99023074, 99021223, Fax: 99231583 www.ssgc.com.pk/ssgc

Sui Southern Gas Company Limited

Checklist for Bidders

Enquiry #: _____ Opening Date: _____

Time: _____ M/s, _____

Please ensure before submitting the bid, that following Information/ Documents have been submitted / providing along the bid. Kindly Check ( ) appropriate box.

Sr. No	Checklist Item	Action Required	(Yes / No)
1	Tender Document Availability on SSGC website & EPADS	Ensure the bidder participates via EPADS.	
		Download the tender document from EPADS.	
		Fill the BOQ/ Bid Form/ Schedule of Requirement correctly.	
		Submit the bid on EPADS before the deadline; otherwise, bid will be rejected.	
2	Physical Bid Bond Submission	Submit the physical bid bond to the Tender Room (SSGC HO) before the bid submission. And upload Scanned copy of Bid bond on EPADS.	
		If Bid Bond in original not submitted, the bid will be rejected.	
3	Bid Submission Deadline	Confirm all documents (electronic and bid bond in original) are submitted before the specified bid submission deadline.	
4	Signature and Stamp	Ensure all Tender documents (including SBD & SSGC Tender Documents) are duly signed and stamped and uploaded on EPADS or else bid will be liable for rejection.	
5	Additional Documents (if any)	Verify if any other documents specified in Tender document are included in the bid on EPADS	
6	Tender Fees	Rs. 0 (Free)	
7	Technical literature	Original Technical literature is enclosed, if any duly signed & stamped	
8	Any change in your current address, Phone Fax no & Email etc. intimated	Bidders are required to intimate Procurement dept. for any change in Current address, email, contact information etc. in tender documents	
9	Bid validity	Bid Validity as specified is mentioned	
10	Delivery / Completion period	Delivery / Completion period has been specified as per tender terms	
11	Corrections/Cutting/Overwriting	All corrections/cutting/overwriting are singed & stamped	
12	Sample	Sample (if necessary) is enclosed as per form attached in Tender Document	
13	Form-X	Form- X Duly Signed & Stamped	
14	Price Schedule / Manual BOQ	The Price Schedule and Manual BOQ (where applicable) of SSGC tender documents shall be duly filled in, signed, and stamped by the bidder and placed in the Financial folder submission. In addition, the bidder shall ensure that the Financial Form is electronically filled in and submitted through EPADS. Failure to comply with the above requirements shall render the bid liable to rejection in Single Stage–Two Envelope method. All bids shall be evaluated electronically through the EPADS system.	
15	Undertaking of Eligibility, Legal Capacity, Non-Bankruptcy, Non-conviction, Non-Blacklisting and No Conflict of Interest For Procurement participation	Bidders are required to duly fill, sign & stamp the Undertaking of Eligibility, Legal Capacity, Non-Bankruptcy, Non-conviction, Non-Blacklisting and No Conflict of Interest For Procurement participation Form attached with the tender document.	

Note: Non-Availability of the above information/documents, or incomplete/incorrect statement on this checklist may result in rejection of the bid at / after the bid opening.

As per SRO296(1)/2023 dated 08th March 2023 "E-Pak Procurement Regulations, 2023" all bidders are advised to register in e-Pak Acquisition and Disposal System (EPADS).

Sui Southern Gas Co. Ltd. Procurement Dept. H.O Gudduwala

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Bidders Authorized Representative

Sui Southern Gas Company Limited (SSGCL)

Contents.

Part – A		
Section – 1	General Terms & Conditions	Included
Section – 1A	Additional Terms & Conditions for FOB/C&F	Included
Annexure–A	Format of Bid Bond Bank Guarantee	Included
Annexure–B	Format of Performance Bank Guarantee	Included
Annexure–C	Declaration by Supplier (Integrity Pact)	Included
Section – 2	Special Conditions of Tender Document	Included /Not required
Part – B		
Section – 3	Bid Form (Schedule of requirement)	Included
Section – 4	Specifications/Drawing (if applicable)	Included/Not required
Section – 5	Undertaking of Compliance with Integrated Management System (IMS) Manual and Blacklisting Mechanism	Included

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

SSGC

SUI SOUTHERN GAS COMPANY LIMITED
Procurement Department

M/s. _____

_____

_____

Tender Enquiry No. _____

INVIATION TO BID

Sui Southern Gas Company Limited, (SSGCL) has pleasure in extending you an invitation, to submit bid for the subject material according to Terms and Conditions specified in the attached Tender Document. Please read following instructions before submission of bid:

1. Bids are to be submitted in sealed envelope provided with the tender, indicating Tender Enquiry Number & its opening date and time on the face of the envelope.
2. Bid Bond @ 2% of the total FOR / FOB value shall be enclosed with the bid without which bid will be rejected and returned to bidder unannounced. The Bid Bond shall remain valid till the last date of the month in which it is expiring.
3. In case the bid opening date falls on a holiday or due to some unavoidable circumstances, it is not possible to open on scheduled date, it will be opened on next working day at the same time and at the same venue.
4. The bidder shall bear all expenses associated with the preparation and delivery of its bid/sample and the Company will in no case be liable in this respect.
5. Prospective bidder requiring any information or clarification of the tender may notify the same by fax or at the mailing address. The Company will respond to any request for explanation or clarification, if received within reasonable time prior to submission of bids.
6. The Company reserves the right to cancel, add, delete or amend tendered items/quantities/any part of the tender during the bidding period without assigning any reason. However, bidders shall be informed about it prior to bid opening/process.
7. The Company reserves the right to accept or reject any bid or part of a bid or to annul the bidding process and reject all bids at any time prior to award of contract/purchase order without thereby incurring any liability to the affected bidder(s).
8. In case of Single stage two (02) envelope bidding procedure (if mentioned in press advertisement & Tender document), sealed technical offer & sealed bid shall be submitted in separate envelopes Bid Bond will be enclosed with "commercial" bid. "Technical Proposal" and "Financial Proposal" is to be mentioned on the top of the envelope. Technical offers will be opened and evaluated first. Financial offers of only technically compliant bidders will be opened at a later intimated date in presence of bidder's representatives. Financial proposal of technically non-compliant bidders will be returned un-opened along with their bid bond.
9. For Tenders invited on F.O.B/C&F basis, conditions as mentioned in Section-1A will also apply.
10. The Company will appreciate confirmation by fax No 92-21-99231583 or email at mmte@ssgc.com.pk or to DGM (Procurement) of your intention to submit the bid and if not interested in submission of bid, it will be appreciated if it is intimated through fax or email with mentioning of reasons.
11. Bids are required to be submitted at:

    Tender Room, CRD Building, Head Office Complex, Sir Shah Suleman Road Gulshan-e-Iqbal, Karachi Pakistan. Ph. 0092-21-99021024, 0092-21-99021223, 0092-21-99021279, 0092-21-99013074, Fax # 0092-21-99231583, Email: mmte@ssgc.com.pk

Hope and look forward for your valued participation.

Thanking you

Yours sincerely

General Manager (Procurement)

Sui Southern Gas Co. Ltd. Procurement Dept. Gulshan-e-Iqbal

Section – I

General Terms & Conditions

1. **Submission of bids:**

1.1. Bids are to be submitted in sealed envelope provided with the tender (in such a manner that contents are fully kept enclosed and cannot be seen until opened) indicating tender enquiry number, its opening date and time on the top of the envelope. Envelopes shall be addressed to General Manager (Procurement Department) on the address provided on "invitation to bid". Envelope shall indicate the name and address of the bidder for returning the bid in case it is declared late or submitted without bid bond.

1.2. Sealed bids (as above) shall be mailed/submitted/dropped in tender box placed at Tender Room, CRD Building, SSGC Head Office. Bids are to be delivered on or before closing time after which bid will not be entertained. In case bid is sent through courier, the same shall be delivered at least half an hour before scheduled opening time.

1.3. The Company may at its discretion extend the closing date for the submission of bids, in which case all rights and obligations of the purchaser and bidders previously subject to the closing date will thereafter be subject to the date extended. However, any request for extension received from prospective bidders less than one week prior to bid opening date may not be entertained. In case of extension in bid opening date, the same will be advertised in press and simultaneously shall be intimated to prospective bidder who had purchased the tender documents.

1.4 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct the errors made by the bidder, in case of any correction etc. it shall be signed and stamped by the person signing the bid.

1.5. The quoted price shall be inclusive of all duties/taxes except GST, which is to be mentioned separately. The supplier shall declare (if applicable) regarding non-applicability of GST for which documentary evidence shall be enclosed or could be produced upon demand.

1.6. Rates shall be item-wise, as given in price schedule/schedule of requirement/Bid Form unless otherwise specified.

1.7. Bidder is responsible for timely delivery of bids at location specified 1.2 above. Company will not be responsible for misplacement/ tampering/non-attendance/delay or any other incident in case the bid is not delivered at the designated place & time.

1.8. Any bid received late after the closing date and time, will be rejected and returned unopened.

1.9 The quotation shall only be acceptable on/as per Bid Form. In case for foreign tender when Local Agent submits bid on behalf of different bidders, a separate Bid Bond for each Bid is required. Likewise for tender when bidder submit alternative bids a separate bid bond for each bid is required or else bid will be liable for rejection.

1.10 Deviation from tender terms and conditions is not allowed. However, in unavoidable circumstances, these shall be mentioned at the bottom of "Section 3: Bid Form" deviation on any other page will not be entertained.

1.11 Discount offered (if any) shall be mentioned on the "bid form" only.

1.12 The bidder(s) or their authorized representative shall put his full signature with stamp & date on each page of tender document as well as enclosure vis-a-vis drawings, specifications etc. Any correction, overwriting shall be duly signed & stamped.

1.13 The bid is to be completed and returned to the Company in accordance with, General terms & conditions. General terms & conditions duly signed & stamped (as a token of acceptance) shall be submitted along with Bid Form (Price schedule) duly completed as per requirement. However, specifications/drawing is to be retained by bidder for their future references.

2. **Eligible Countries / bidders:**

The invitation for bids is open to all manufacturers/suppliers/stockiest/dealers/pre-qualified bidders but is not applicable to those countries where inter trade protocols with Pakistan do not exist or those countries from where imports are not allowed by Government of Pakistan.

3. **Qualification/Disqualification of Suppliers:**

The Company, at any stage of the procurement proceedings, having credible reasons for or prima facie evidence of any defect in supplier's or contractor's capacities, may require the suppliers or contractors to provide information regarding their professional, technical, financial, legal or managerial competency,

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whether already pre-qualified or not. The Company shall disqualify a supplier or contractor if it finds, at any time that the information regarding their qualification as supplier or contractor was false and materially inaccurate or incomplete. Black Listing Mechanism

4. **Joint Ventures:**

In the event that the successful bidder is a joint venture (formation of two or more companies), the Company will require an undertaking on judicial stamp paper that the parties to the joint venture accept joint and several liabilities for all obligations under the purchase order/contract.

5. **Clarification of tender documents:**

Prospective bidders requiring any further information or clarification of the tender documents may notify, the Company in writing or by fax or at the Company's mailing address indicated in the "invitation to bids". The Company will respond in writing to any request for information or clarification of the tender documents, if received five working days prior to closing date for the submission of bids prescribed by the Company. The Company response (including an explanation of the query) will be sent in writing or by fax/e-mail to all prospective bidders who have purchased the tender documents. Verbal instructions/reference will not be acceptable.

6. **Modification and withdrawal of bid:**

6.1 The bidder may modify or withdraw its bid after the bid submission, provided the written notice of the modification or withdrawal is received by the Company prior to the deadline prescribed for submission of bid. After the bids/quotations are opened, no bidder shall be allowed to revise, propose or request any change in the bid.

6.2 The bidder's modification or withdrawal notice shall be sealed and addressed to GM (P). A withdrawal notice may be sent by fax followed by a signed copy.

6.3 Bids once opened cannot be withdrawn during validity period.

7. **Bid validity:**

All offers shall remain valid up to 90 days (120 days in case of Two Envelope bidding procedure) from the date of opening of bids, until any further extension agreed by the bidder. If the bidder agrees for extending bid validity the bid bond shall also be extended accordingly. A bidder giving extension to his bid validity will not be required or permitted to modify his bid. If there will be any query/clarification or extension request asked by the Company, the bidder should reply the same within 7 days after receipt of the same and if bidder takes more than 7 days the delay in reply will be added to their bid validity period.

8. **Rate Escalation:**

8.1 **All items except line-pipe:**

Quoted prices shall remain valid, firm, irrevocable and fixed till the fulfillment of obligations by the bidder and will not be subject to escalation / change on any account.

8.2 **Line-pipe only:**

8.2.1 Bidders are essentially required to submit detailed breakdown of rates indicating per ton price of:

a) H.R. Coil.

b) All other charges (including wastage, transportation, conversion cost etc).

8.2.2 Rate / price offered by the bidders shall be firm and irrevocable. However bidder offering pipe manufactured from Pakistan Steel Mills (PSM) HR coil are required to submit certified documentary evidence of HR coil rates. Adjustment in line-pipe rates (from the bid opening date till the currency of order) due to change in rate of HR coil manufactured by PSM is admissible to the extent of raw material cost without wastage. The bidders are required to submit certified documentary evidence of HR coil rates published by PSM, at the time of submission of bids. SSGC may verify the document / rates from PSM.

8.2.3 The variation clause however shall not be applicable on line-pipe quantities which were delivered within 20 days of the announcement of the variation (both days inclusive) in price of HR coil by PSM.

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8.2.4 The variation clause also shall not be applicable on the line pipe quantities delivered after the specified delivery schedule (total or monthly consignment wise)

8.2.5 No escalation is applicable on line pipe manufactured from imported HR coil.

9. **Bid bond (earnest money):**

Bid bond equivalent to two percent (2%) of the total offer value, in favor of Sui Southern Gas Company Ltd. shall accompany the bid if bid value is above Rs.500,000 in the form of pay order, demand draft, call deposit receipt or a bank guarantee (specimen of bank guarantee is attached at Annexure-A), issued by a scheduled bank in Pakistan. The bid bond shall remain valid for 120 days (150 days in case of Two Envelope bidding procedure) unless specified otherwise. The bid bond shall be returned/refunded to the unsuccessful bidders while the bid bond of the successful bidder shall be retained, till submission of Performance bond (if applicable). Bids without bid bond will not be considered. In case the order value is less than Rs: 500,000 the bid bond in lieu of performance bond will be retained till fulfillment of obligations by the supplier. However, in either case the bidder is responsible to arrange the extension the bid bond validity as per requirement. If bid bond submitted by the supplier is more than 2% of ordered value, it may be replaced with appropriate value. If order value is less than Rs. 500,000, the bid bond will be returned along with the order. Bid bonds of non-compliant bidders may be released during evaluation process. The bid bond may be forfeited if a bidder withdraws the bid duringvalidity period specified by the bidder or if successful bidder fails to:

- Accept purchase order.
- Furnish performance guarantee in accordance with clause 16 of Section 1,
- Supply material as per requirement and delivery schedule.

9.1 In the event of bid bond validity following short of the prescribed period of 120 or 150 days as the case may be either (i) due to extension in the bid submission date or (ii) where so required by the procuring agency, then in such an event it shall be mandatory on the padder to extend the bid bond validity upto 120/150days within 30 days of the opening of technical proposal / bid, and /or where so required by the procuring agency.

9.2 In the event of the bid security amount deposited / furnished by the bidder falls short by 10% of the requisite Bid security amount. The procuring agency keeping in view the nature of the procurement may consider and allow the bidder to deposit / furnish the balance 10% amount, provided the bidder does so within 15 days of the opening of the bid. Notwithstanding that all other terms & conditions have been fully complied with.

10. **Opening of bids:**

Bids will be opened in presence of bidders or their authorized agents at the address provided on "invitation to bids". The bidder's representatives who are present shall sign the bid opening sheet (attendance sheet) to mark their attendance/witness. Commercial contents of bids will be announced/recorded in bid opening sheet.

11. **Preliminary Examination of bids:**

11.1 The Company will examine the bids to determine their completion, computational errors, provision of guarantees, authorized signature and other related matters.

11.2 Arithmetic errors will be rectified on the following basis. Discrepancy between unit price and the total price obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price will be corrected. Discrepancy between total bid amount and the sum of total prices, the total prices shall prevail and the total bid amount will be corrected.

11.3 Prior to a composed evaluation, the Company will determine the substantial responsiveness of each bid to the bidding documents. In Company's opinion a substantially responsive bid is the one which conforms to all the terms and conditions of the bidding documents without any material deviation.

11.4 Bid determined as not substantially responsive will be rejected by the Company and cannot subsequently be made responsive by the bidder through correction of the non-conformity.

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12. **Clarification of submitted bids:**
To assist in the examination, evaluation and comparison of bids, the Company may at its discretion inquire any clarification from bidder about their bid. All responses by bidders shall be provided in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

13. **Technical Literature & Samples:**

The Bidder(s) shall submit the following:

13.1 Samples (if applicable/required)
13.2 Original or legible copy of technical literature/performance characteristics
13.3 Test Certificates (if applicable/required)
13.4 Documentary evidence for legal import in case of imported material. (At the time of delivery when quoted on FOR basis)
13.5 In case of pipeline operation material bidders must also attach a "proof from supplier/ manufacturer, that goods offered have been used successfully on a high pressure natural gas pipeline elsewhere under tropical climatic conditions.

13.6 Specification Compliance Sheet:
Company requires a clause-by-clause commentary on the Specifications, demonstrating the materials responsiveness to those specifications or a statement of deviations and exceptions to the provisions of the specifications, if so required/desired. For purposes of the commentary to be furnished pursuant to above, the bidder shall note that standards for workmanship, material and equipment and references to brand names or catalogue numbers, designated by the Company in the specifications are intended to be descriptive only and not restrictive. The bidder may substitute other authoritative standards, brand names and/or catalogue numbers in its bid provided which demonstrates to the Company's satisfaction that the substitutes are equivalent or superior to those designated in the specifications by the Company.

Bid which does not possess above documents, certificates etc., may be considered technically Non-compliant.

13.7 The offer shall be accompanied with all technical data/documents/certifications as required under the tender specifications. Evaluation shall be carried out on the basis of data/ documents/certifications submitted with the bid. No clarification, additional information may be sought / accepted after bid opening.
13.8 Deviation to technical specifications:
The bidder shall fill the "technical compliance sheet" and mention offered specifications along with reference to its technical brochure/literature (page/clause No.etc). Statement such as "Compliant" or "Confirmed" is not acceptable. Deviation to tender terms and technical specification is not acceptable. However, if bidder feels to mention minor deviation, the same shall be referred categorically on the "Bid Form" as well as on the technical compliance sheet stating reference of its technical data sheet/brochure. In case of insufficient information, data or documents, the Company is not liable to seek clarification and the bid may be determined non-compliant on provided information.

14. **Award/Evaluation Criteria:**

14.1 In case of locally manufactured items e.g. service line material & meter components, manufactured by local vendors, the lowest bidder will be awarded maximum quantity as per his declared capacity and past performance in respect of delivery and quality. New vendors / manufacturers shall also be considered for placement of a purchase order up to a maximum of 10% of the tender quantity if their submitted sample has been tested and approved and provided they have quoted lowest price or agree to accept the order on lowest received price.
14.2 Generally for other items other than above, ordering shall be based on technical compliance and lowest quoted price. Supplies may be subject to pre shipment inspection and post qualification by a third party in case of foreign material, If required during the process of manufacturing and / or inspection, SSGCL representative may visit the manufacturer facility to witness the manufacturing / inspection process.

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14.3 Evaluation may be carried out both on item or on group of items/single or multiple package basis depending upon the nature of requirement exclusively at the discretion of the company to ensure economic procurement.

14.4 Company reserve the right to settle the final terms of supply with the lowest evaluated and commercially responsive bidder: Any effort by the bidder (s) to influence the outcome of bid evaluation or placement of purchase order may result in disqualification of the bidder.

15. Loading of Bids:

Bids may be loaded with following if offer found to be deviated from specifications, delivery schedule, terms & conditions without stating the amount involved in such deviation by following method:

15.1 The cost of compensation / loading amount for that item shall be derived from the bid itself.

15.2 If 15.1 is not possible, average of rates of other bidders, who have quoted for that item conforming to technical specification, shall form the basis for cost compensation/loading.

15.3 The company will encourage participation by local bidders who will be given price preference. Landed cost factor shall be determined as per prevailing Government policy / SRO. However they will submit details of local value addition on raw material imported by them and percentage of locally manufactured component with documentary evidence.

16. Performance Bond:

16.1 In case purchase order value is above Rs:500,000, the successful bidders shall submit performance bond guarantee which is to be submitted within ten days from receipt of LOI or order along with integrity pact. The successful bidders shall submit a performance bank guarantee (PBG) in the form of a pay order or bank guarantee (specimen attached at Annexure-B) issued by a scheduled bank in Pakistan, for an amount equivalent to 10% of the total value of the purchase order or as specified, in the "letter of intent". The performance bond unless specified otherwise; shall remain valid till;

16.1.1 Completion of final satisfactory delivery in case of consumable items.

16.1.2 12-18 months from the date of satisfactory delivery of the equipment/machinery.

16.1.3 Satisfactory delivery/installation of system in case the installation responsibility is on supplier's part.

16.1.4 120 days in case of chemicals.

16.1.5 In case of locally manufacturing item, the PBG equivalent to 3 months delivery schedule will be required after placement of purchase order which should remain valid till completion of final satisfactory delivery of the ordered quantity.

16.1.6 In case of small diameter line pipe (MS/MDPE) the PBG shall remain valid up to 3 months after completion of satisfactory final delivery.

16.1.7 In case of Vehicles, Manufacturer's Warranty is required in lieu of PBG.

16.2 The guarantee will be released after completion of this period, subject to satisfactory performance of the supplied equipment/machinery/system as mentioned at 16.1 above. The supplier shall keep the guarantee valid at their cost until fulfillment of the obligations.

16.3 In case the bidder does not submit the performance bond as specified, the delivery time of goods shall be deemed to have commenced 10 days (15 days in case of import) from the issuance of letter of intent/purchase order. The proceeds of the performance bond shall be payable to the Company as compensation for any loss resulting from the supplier's failure to complete its work under the purchase order/ contract. The validity period of the performance bond is to be extended if the delivery date/period is being extended mutually by the Company/Supplier.

14.

16.4 The performance bond will be discharged / returned by the Company not later than thirty (30) days following the date of completion of the supplier's work under the purchase order/contract including any warranty/guarantee/performance obligations as specified in the special conditions of contract. The supplier shall not be absolved of their liability to perform in case of encashment of performance bond by the Company, who shall have the right to claim and receive all damages/losses incurred due to non-performance.

16.5 The Company shall promptly notify the supplier in writing for any claim arising under this guarantee. Upon receipt of such notice, the supplier shall promptly repair or replace the defective goods or parts thereof, without cost to the Company other than, where applicable the cost of inland delivery of the repaired or replaced goods or parts from the port of entry to the final destination.

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16.6 If the supplier, having been notified, fails to rectify the defect (s) in accordance with the purchase order/contract, the Company may proceed to take such remedial actions as may be necessary at the supplier's expense. Any amount payable by the supplier under this clause may be recovered by the Company by withdrawing from the performance bond without having to notify or seek the approval of the supplier.

16.7 Nothing herein contained shall be construed to limit supplier's obligation of performance of the order/contract to the value of the performance bond.

16.8 **Guarantee/Warranty:** In case where performance guarantee is not applicable, the supplier shall confirm that all suppliedgoods under the contract/purchase order are new, unused, of the most recent or current modelsand incorporate all recent improvements in design and goods unless provided otherwise in the contract/purchase order. This guarantee shall remain valid for a period of twelve to eighteen months after the goods have been delivered or commissioned.

17. **Purchase Order/Contract:**
Purchase order of quoted material may be placed on fulfillment of conditions mentioned at 14 &16 above which is through formal confirmation for proceedings with the suppliers.

18. **Assurance:**
The successful bidder will be required to give satisfactory assurance of its ability and intention to deliver the goods, pursuant to the tender enquiry and contract within the time set forth therein.

19. **Force Majeure:**

19.1. In the event of either party hereto being rendered unable, wholly or partially, by force majeure circumstances to carry out its obligations under the purchase order/contract documents, such party shall give notice and full particulars and other satisfactory evidence of such force majeure circumstance(s) in writing or by fax to the other party within 7 days after theoccurrence of the cause(s). Relied upon the obligations of the party giving such notice so far as they are affected by such force majeure shall be suspended for the period during cause(s) shall, as far as possible; be remedied and obviated with all reasonable dispatch. The term 'force majeure' as employed herein, shall mean acts of God or public enemy, civil insurrection, fires, floods, earthquakes or other physical disasters, order or request of governments, blockade or embargo. It is, however, clarified that strikes, lockouts, shortage or non-availability of raw materials, rains, and disturbances, other labor dispute or congestion's in ports on the supplier's side shall not be included in the term 'force majeure'.

19.2 In case the force majeure contingencies last continuously for more than one month, both parties will agree on the necessary arrangements for the further implementation of the purchase order/contract. In case further implementation is unforeseeable and impossible, both parties shall arrange for the termination of the purchase order/contract, but without prejudice to their rights and obligations prior to such termination it being understood that each party shall fulfill its contractual obligations so far as they have fallen due before the operation of force majeure.

20. **Amendment in purchase order/contract:**

20.1 The Company may at any time by a written notice to the supplier make changes within the general scope of the purchase order/contract in any one or more of the following:-

20.1.1 Drawings, designs or specifications where goods to be furnished under the purchase order/contract are to be specifically manufactured for the Company.
20.1.2 The method of shipment or packing.
20.1.3 The place of delivery.
20.1.4 Quantities of item up to a maximum variance of +15% of purchase order/contract value.

20.2 Company reserves the right to increase/decrease the quantities or delete any or all items listed in the price schedule/schedule of requirement/bid form without assigning any reason.

20.3 Upon notification by the Company of such modifications the supplier shall submit to the Company an estimated cost for the proposed modification within ten (10) calendar days of receipt of notice of the modification and shall include an estimate of the impact (if any) of the modification on the delivery dates under the purchase order/contract, as well as a detailed schedule for the execution of the modification, if applicable.

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20.4 The supplier shall not perform modification in accordance with clause 20.1 above until the Company have authorized a modification order in writing on the basis of the estimate proyided by the supplier as described in clause 20.3.

20.5 Modification mutually agreed upon shall constitute a part of the work under the purchase order/contract and the provisions and conditions of the contract shall apply to the said modification.

20.6 If modification made by the Company results in a variation in purchase order/contract quantities whose net cost effect is within 15% of the total value then the original purchase order/contract rates would be applicable. Any "modification" affecting the quantities and the corresponding cost effect beyond 15 percent would be mutually agreed upon between the Company and the supplier.

21. Extension in delivery period:

21.1 Delivery of the goods shall be made by the supplier in accordance with the schedule of requirement and delivery period; however, the supplier may claim extension of the time limits as set forth in the schedule of requirements and delivery period in case of

21.1.1 Modification in the goods ordered by the Company pursuant to clause 20.

21.1.2 Delay in provision of any services which are to be provided by the Company (services provided by the Company shall be interpreted to include all approvals by the Company under the contract).

21.1.3 Delay in performance of work caused by orders issued by the Company.

21.2 The supplier shall demonstrate to the Company's satisfaction that it has used its best endeavors to avoid or overcome such causes for delay and the parties will mutually agree upon remedies to mitigate or overcome such causes for delay.

21.3 Not withstanding clause 21.1 above, the supplier shall not be entitled to an extension of time for completion unless the supplier at the time of such circumstances arising, immediately has notified the Company in writing of any delay that it may claim as caused by circumstances pursuant to clause 21.1 above and upon request of the Company, the supplier shall substantiate that the delay occurred is due to the circumstances referred by the supplier.

22. Packing:

22.1 The material shall be in original/sealed packing to ensure delivery without any damage during transit.

22.2 If any of the good is discovered to be damaged or unacceptable at the point of embarkation, the supplier shall be responsible for replacement of those goods free of any charge and cost to the Company, within the delivery time schedule of the contract/purchase order.

22.3 The identification marks showing contents, quantity and contract/purchase order number shall be printed on each skid/metal container/case containing one copy of invoice & packing list.

22.4 Handling and Transportation:
The Supplier shall arrange for the proper stacking of the Goods and for its proper storage and lashing and for other such provisions/suitable measures as may be necessary to safeguard against movement and damage to the Goods from the point of loading to its designated destination.

23. Inspection:

23.1 Pre-delivery inspection may be carried-out at the premises of supplier(s) and/or post delivery inspection at company's any location, by the appointed inspector/inspection team, third party inspectors appointed by the Company.

23.2 The Company reserves the right to arrange inspections and tests to the goods or manufacturing processes at any stage at any of the premises of the supplier or its subcontractor(s) or and at the point of delivery end at the goods final destination. Where conducted on the premises of the supplier or its sub-contractor(s), all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the Company. Such inspection, however, shall not relieve the Supplier to fulfill the obligations under the

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purchase order/contract. If goods fail to conform to the specifications, the Company may reject them.

24. **Delivery:**

24.1 Free delivery at any of the following locations, unless specified otherwise:

- 24.1.1 R & D Section, Stores Department Abul Hasan Ispahani Road, Karachi.
- 24.1.2 R & D Section, Stores Department F-37, SITE Karachi.
- 24.1.3 R & D Section, Stores Department F-76, Dope Yard SITE, Karachi.
- 24.1.4 Meter Manufacturing Plant, Sir Shah Suleman Road, Gulshan-e-Iqbal Karachi.
- 24.1.5 Khadeji Store, 57th Kilometer at Super High way Karachi.
- 24.1.6 Any other location specified by the company.

24.2 Delivery period shall commence after 10 days (15 days in case of import) of the issuance of letter of intent or from the date of purchase order/contract whichever is earlier, unless otherwise specified.

24.3 The supplier shall replace defective material at their risk & cost including transportation, duty, taxes etc.

24.4 GST Invoice if applicable be submitted at R&D section Stores Department along with material & delivery challan.

24.5 Unloading and stacking through cranes, fork lifters, labor etc. will be arranged by supplier at delivery site (for material like Pipes/Heavy Machinery & Equipment etc).

24.6 Delivery is to be made strictly in accordance with "delivery schedule" as specified by the Company.

24.7 The rejected material is to be collected/lifted by the supplier within a maximum period of one month after its intimation by the Company. Beyond specified period, the Company shall not be responsible for storage/safety of the uncollected material.

25. **Delivery Failure:**

25.1 In case the supplier fails to supply/ship the material within the stipulated period, the Company have the right to make an alternative arrangement for the purchase of the goods on such terms as may be offered. In such event all losses, cost and charges sustained/incurred by the Company on stated purchase shall be recovered from the Supplier without prejudice to any other right or remedy available to the Company which includes recovery of losses sustained by the Company from any due payment of the said supplier.

25.2 In the event Company remains unable to make such alternative arrangements, the Company has the right to recover from the supplier any or all losses sustained as a result of the supplier's failure to ship/supply the goods as per schedule of delivery.

25.3 In the event Company being forced to purchase any quantity or any other alternative not specified in this document as a result of any failure to supply/ship the material, the Company shall have the right to terminate the contract/purchase order without prejudice to any other rights or remedies available to the Company.

26. **Payment:**

26.1 The supplier after delivery of goods and its acceptance shall submit invoice to Finance Department of the Company, containing following information i.e.

(a) Purchase order No. & date
(b) Items
(c) Quantity
(d) Price
(e) Invoice value
(f) Point of delivery
(g) Delivery challan indicating delivery date, etc.

Payment will be made within 30 days of completion of stated formalities.

26.2 Income Tax @ 3.5% or as applicable under the prevailing government rules will be deducted at source (except where the supplier provides an income tax exemption certificate). Quoted price shall be inclusive of all taxes, except GST, which shall be mentioned separately. Supplier(s) are required to submit signed and stamp acknowledgement slip, Sales Tax return, Annex "C" & Annex "I" (whichever applicable) in which Sales Tax(of relevant Sales Tax invoice) is paid.

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26.3 In case supplier is not liable to pay tax under the income tax ordinance or is liable to pay tax at a lower rate the supplier shall obtain a certificate from the tax authorities in Pakistan to that effect. In case the required certificate is not produced by the supplier prior to the date of payment, then the Company shall deduct tax at source from the gross payment payable to supplier.

27. **Liquidated damages:**

27.1 If supplier fails to deliver ordered material within the stipulated period/scheduled time specified in purchase order, Company, without prejudice to any other remedies, shall deduct from the bill or any other due payments/guarantees, as liquidated damages, a sum equivalent to 0.1% per day of the undelivered goods up to maximum 10%. The liquidated damages shall also be applicable for the cancelled quantity of goods under clause 28.

27.2 Whenever liquidated damages become payable, in the event that delivery of all goods and equipment is not made within the time period specified except on account of force majeure, the Company shall quantify the same and shall serve notice to the supplier requiring payment thereof. If the supplier fails to remit payment within 15 days of receipt of such notice, the Company shall forth-with become entitled to recover the same without recourse to the supplier, by calling upon The Performance Bond, withdrawals by way of liquidated damages shall not reduce the value of the Performance bond.

27.3 The payment of liquidated damages shall not relieve the supplier from performing and fulfilling all its obligations under the contract/purchase order nor shall the right and entitlements of the Company be affected or reduced in any manner.

27.4 In case of order placed on FOB/C&F basis, the delivery period shall commence from the date of confirmation of L/C. However, delayed submission of PBG period in excess of time limit will be deducted from the delivery period for the purpose of recovery of late delivery charges.

27.5 The liquidated damages shall be the sum equivalent to point one (0.1%) percent of the Contract price of the delayed goods as unperformed services for each day of delay, until actual delivery or performance, up to a maximum deduction of ten (10) percent of the Contract price. Once this maximum is reached, the Company may consider termination of the Contract at the risk and cost of the Supplier.

28. **Default by Supplier:**

28.1 The Company may, without prejudice to any other remedy by written "notice of default" sent to the supplier, cancel the purchase order whole or in part; if:

28.1.1 The supplier fails to deliver any or all of the ordered quantity as per specified delivery schedule or any extension thereof granted by the Company

28.1.2 The supplier fails to perform any other obligation(s) under the "purchase order".

28.1.3 The Company during the delivery period has reasons to believe that the supplier will not be able to fulfill the obligations under the purchase order/contract.

The Company prior to exercising its right to cancel the purchase order/contract shall issue notice to the Supplier specifying the default(s) and the supplier shall submit an explanation within seven (07) days of receipt of such notice. If such explanation is not furnished within the stipulated time or if so furnished, is found to be unsatisfactory and/or the default(s) continues, purchase order/contract may be cancelled. The Company in addition to cancellation of purchase order/contract may suspend/cancel the enlistment of supplier.

28.2 The Company shall have the right to terminate/cancel the contract/purchase order concluded between the supplier and Company; if:

28.2.1 The successful bidder fails to furnish the performance bond as under clause 16 thereof.

28.2.2 The supplier fails otherwise to perform, fulfill or comply with terms, conditions, regulations and requirements of the contract/purchase order to carry out the work in accordance with the provisions thereof or abandons the shipment.

28.2.3 The supplier becomes bankrupt or insolvent or makes an assignment for the benefit of its creditors.

28.2.4 One or more consignments of material delayed by a period of more than three months or non-supplied.

28.2.5 Rejection of manufacturing items as a result of observation by inspection team

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28.2.6 Penalty on higher rejection rate of supplied goods.

28.3 The supplier shall have the right to terminate the contract/purchase order if:-

28.3.1 The Company fails to establish the "letter of credit" within the stipulated period as required.

28.3.2 The Company becomes bankrupt or insolvent or makes an assignment for the benefit of its creditors.

28.3.3 The Company is in default and breach of its obligation and liabilities under the contract/purchase order.

29. **Resolution of dispute:**

The Company and the supplier shall make every effort to resolve the disagreement or dispute arising between them amicably by direct discussion under or in connection with the purchase order/contract.

30. **Applicable law:**

The purchase order/contract shall be governed by and interpreted in accordance with the laws of the Islamic Republic of Pakistan.

31. **Declaration/Integrity Pact/Certification:**

31.1 Successful supplier shall furnish the declaration (specimen attached at Annexure-C) within 10 days after issuance of LOI/order /contract if the order/contract value becomes Rs:10 million or above.

31.2 In case of F.O.B/C&F Purchase order/Contract, the Principal as well as "local agent" both will sign the "integrity pact" as required under this clause.

31.3 Bidders to submit a certificate on Rs:100/- non-judicial stamp paper certifying that they are not black listed by the Government/Autonomous bodies and declared as defaulted supplier.

32. **Arbitration/resolution of disputes:**

32.1 Any difference or dispute arising out of or in connection with the contract between the Company and the supplier which can not be amicably resolved shall be referred to arbitration in Karachi, Pakistan, to two arbitrators, one appointed by each party of such difference/ dispute. In case the judgment of the said Arbitrator being at variance, the matter shall be referred to an "umpire", who shall be appointed by both the side Arbitrators. The umpire shall be retired judge of a High Court or the Supreme Court of Pakistan. Such arbitrators and umpire shall together proceed to adjudicate he disputes in accordance with the Arbitration Act, 1940, as amended from time to time.

32.2 Prior to exercising any right by the Company or supplier to terminate the purchase order/ contract under the conditions stipulated above, a return notice shall be required to be given to the other party specifying such default(s) and calling for submission of an explanation within seven (7) days of receipt of such notice. If such explanation is not furnished within the stipulated time or if so furnished, is found to be unsatisfactory, and the default(s) continuous, the purchase order/contract be terminated with notice to other party.

32.3 The agreement shall be governed by Law of Islamic Republic of Pakistan and the arbitration language shall be English.

32.4 During the course of arbitration, the supplier shall not suspend the performance of his esponsibilities and obligations under the contract unless authorized by the Company in writing to do so.

32.5 In addition to the remedies as stated above, there is a "grievance committee" formed by the Company which can be approached by supplier in case of non-settlement of issues at any stage if supplier feels that settlement is not insight or not justified.

33. **Redressal of grievances by the procuring agency.-**

33.1- Grievance Committee is in place to address the complaints of bidders that may occur prior to entry into the procurement contract.

33.2 Aggrieved bidder may lodge a written complaint concerning his grievances not later than fifteen days after the announcement of the bid evaluation report.

33.3 Bidder is to submit complaint on letter head duly signed by the authorized person. Tender reference, details / nature of complaint, complainant active telephone, cell, postal address, email

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address must necessarily be provided. Incomplete / anonymous complaints will not be responded at all.

33.4 The Committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint

33.5 Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.

34. Blacklisting of Suppliers and Contractors:

The Company shall permanently blacklist or temporarily debar (at least for 6-months from participating in SSGC's tender proceedings) if, a supplier or contractor who either constantly fails to perform satisfactorily performance or found to be indulged in corrupt and fraudulent practices as defined below:

34.1 Corrupt and fraudulent practices" includes the offering, giving, receiving, or soliciting of anything of value to influence the action of an official/Company.

34.2 If the supplier/contractor found responsible for the detriment of the Company during proceedings of procurement/contract, process or its execution.

34.3 Misrepresentation of facts in order to influence the procurement process or the execution of the purchase order/contract.

34.4 Collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non- competitive levels and to deprive the Company of the benefits of free and open competition.

35. Supplier's Guarantee and Responsibilities:

The Bidder/Supplier shall guarantee that the materials supplied against this tender enquiry is new and is of acceptable quality and has been tried and approved on similar jobs. The validity and scope of such guarantee will be in accordance with conditions stated in this document. In case the opinion of the Company the Goods fail to perform the services in accordance with the specifications specified in Section IV due to manufacturing defects/defective material and/or workmanship, the Supplier shall replace, repair or reconstruct such Goods at his own cost in Pakistan wherever the Goods shall be located so that such Goods shall be restored to such conditions that it shall perform in satisfactory operating condition or to replace it with new Goods at Supplier's cost so that the goods shall perform in accordance with the specifications and details as set forth in the Contract/tender documents. If the Supplier shall fail to do so after expiry of 15 days notice to this effect served on him by the Company, the Company shall be at liberty to repair, replace and/or reconstruct the Goods at its costs provided in the event, the Company shall be entitled to recover total cost of such replacement form the Supplier withdrawing from the Performance Guarantee.

36. Language:

The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the bidder and the Company shall be written in English language. Any printed literature furnished by the bidder may be written in another language provided that this literature is accompanied by an English translation in which case for purpose of interpretation of the bid, English translation shall govern.

37. Vehicle Applied by Authorized dealer of local manufacturer :

Incase of vehicle supplied ly authorized dealer of local manufacturer, the authorized dealer will be responsible to get the vehicle (s) registered through Excise Department Government of Sindh and provide Original Registration book / Original Registration Invoice / Tax payment receipt / other related documents & provide the vehicle (s) number plate (s) to SSGC. Registration fee will be reimbursed by SSGC subject to submission of Government of Sindh Excise Department receipt.

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Additional Terms for Tenders on F.O.B/C&F basis:

1. **Submission of bids:**

1.1 Bid bond (Earnest money) @ 2% of the total F.O.B value as per clause 9, of section 1 of "General terms & conditions" is required to be submitted with the bid. It may be noted that bids without bid bond will be rejected and returned to bidder.

1.2 In case the bidder is manufacturer the bid shall either be completely prepared by the foreign bidder including signing and stamping of all documents. In case, such documents are being signed by the local agent of the bidder, the bid shall essentially include supplier's original Performa invoice and an original authority letter in favor of local agent to sign the documents on their behalf. The bid is liable for rejection if these conditions are not met.

1.3 In case of Bidder offering to supply goods which the bidder did not manufacture or otherwise produce, the bidder shall be duly authorized by the goods manufacturer or the producer to submit bid or supply the goods on their behalf

1.4 Bids shall be submitted (preferably through local agents) in two copies, (original + copy).

1.5 The price on unit FOB and C&F basis is to be quoted separately. Following are to be essentially indicated in the bid form:

- 1.5.1 Country of origin.
- 1.5.2 Port of shipment.
- 1.5.3 Estimated gross/net weight, dimension & volume of offered item and estimated weight of each item.
- 1.5.4 Delivery period or schedule in case of bulk quantities.
- 1.5.5 Original technical literature.
- 1.5.6 Beneficiary's complete address.

1.6 Foreign bank charges and L/C confirmation charges will be borne by the supplier.

1.7 **Bid Currency:**

The rates shall be quoted in bidder's home country or in United States Dollars. A bidder expecting to incur a portion of its expenditures in the performance of the contract in more than one currency and wishing to be paid accordingly shall indicate the same in their bid. However, bidder from Pakistan would be paid in Pak Rupee.

(Clause 1.5 of General Terms & Conditions is not applicable)

2. **Bid bond:**

2.1 Bid bond shall be equivalent to two percent (2%) of the total F.O.B value, in favor of Sui Southern Gas Company Limited and shall be in the form of pay order, demand draft, call deposit receipt or a bank guarantee (specimen attached at Annexure-A), issued by a scheduled bank in Pakistan. The bid bond shall remain valid for 120 days (150 days in case of Single Stage Two Envelope bidding procedure) unless specified otherwise. The bid bond shall be returned/refunded to the un-successful bidders while the bid bond of the successful bidder shall be retained till submission of Performance bond. Bids without bid bond will not be considered. In case the order value is less than US$:25,000 the bid bond in lieu of performance bond, will be retained till fulfillment of obligations by the supplier. However, in either case the bidder is responsible to arrange the extension of bid bond validity as per requirement. If bid bond submitted by the supplier is more than 2% of ordered value, it may be replaced with appropriate value. Bid bonds of non-compliant bidders may be released during evaluation process. The bid bond shall be denominated in the currency of the bid or any other freely convertible currency.

2.2 Bid submitted on behalf of different principals shall be required to submit separate bid bond along with the bid for each offer.

(Note as mentioned at Clause 9, 9.1 & 9.2 of General Terms & Conditions shall also apply).

3. **Conversion to single currency:**

In order to carry out evaluation and comparison, the Company will convert all bid prices expressed in various currencies to Pak Rupees at the buying exchange rates established by the State Bank of Pakistan or any other commercial bank in Pakistan for similar transactions on the date of opening of bids. In case of Two Envelope Bidding System, the exchange rates prevailing at the time of opening of Technical Proposals will be used for conversion and evaluation.

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4. **Evaluation Criteria:**

4.1 The evaluation of bids will be carried out on C&F / landed cost basis, however purchase order will be placed on FOB price on freight to collect basis. The bidders are required to submit best freight charges obtained by them from Pakistan National Shipping Corporation (PNSC) in order to have a uniform basis to arrive at C&F cost. Bill of lading to indicate "freight payable by the consignee at destination" in local currency. Foreign currency exchange rate (selling) will be considered as of bid "opening date".

4.2 In the case of goods to be offered from outside Pakistan, custom duties and other similar import taxes which are applicable shall be added to the bid.

4.3 In case shipment by air it shall be arranged through Company's airfreight forwarder (s) or their nominated agent. "on freight to collect basis ".

(Clause No. 14.3 to 14.4 of General Terms & Conditions are also to be applicable).

5. **Loading of Bids:**

Freight charges from port of loading up to Karachi port or unit C&F value must be indicated in bid form, failing, which bid will be loaded by 5 to 10% freight charges. Bid will be declared non-compliant if loading results an extensive increase in price of material.
(Clause 15 of General Terms & Conditions is also applicable).

6. **Performance bond:**

6.1 In case purchase order value is US$:25,000/- or above or equivalent for other currencies, letter of intent will be issued to successful bidders for submission of performance bond guarantee which is to be submitted within 15 days from receipt of L.O.I. The successful bidders shall submit a performance bank guarantee (P.B.G) in the form of bank guarantee (specimen attached at Annexure-B) issued by a scheduled bank in Pakistan, for an amount equivalent to 10% of the total value of the purchase order or as specified, in the letter of intent .The performance bond unless specified otherwise, shall remain valid till:

6.1.1 Completion of final satisfactory delivery in case of consumable items.
6.1.2 12-18 months from the date of satisfactory delivery of the equipment/machinery.
6.1.3 Satisfactory delivery/installation of system in case the installation liabilities will be on supplier's part.
6.1.4 120 days in case of chemicals.

6.2 The Letter of Credit shall be operative upon receipt of Performance Bond (as specified in para6.1) and integrity pact , any delay due to late submission of Performance Bond will be on supplier's account. Late submission of PBG should not affect the delivery schedule.

6.3 The performance bond shall be denominated in foreign currency or in currency of the contract/purchase order or in a freely convertible currency acceptable to the Company and shall be in the form of a bank guarantee.

6.4 In very special case subject to approval of the management, the P.B.G could be acceptable in Pak Rupee. However, an undertaking should be given by the supplier that in case of encashment of P.B.G. supplier shall deposit short fall amount due to Pak Rupee exchange rate.

6.5 **Warranty/Guarantee:**
In case where performance guarantee is not applicable, the supplier shall warrant that all goods supplied under the contract/purchase order are new, unused, of the most recent or current models and all recent improvements in design and goods have been incorporated, unless provided otherwise in the contract/purchase order. This guarantee shall remain valid for a period of twelve to eighteen months after the goods have been delivered or commissioned.
(Clause 16.2 to 16.8 of General Terms & Conditions are also applicable).

7. **Delivery:**

7.1 In case of "FOB" order/contract, shipment(s) shall be effected per vessel of Pakistan National Shipping Corporation (PNSC) owned or chartered vessels on "freight to collect" basis. Bill of lading to indicate "freight payable by the consignee at destination". In case goods ready for shipment and the PNSC vessel is

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not available at port of loading, supplier shall intimate the same to Company immediately so that matter could be taken with PNSC in Pakistan.

7.2 In case of C&F order/contract, the supplier hereby guarantees/ensure:

7.2.1 To use clean and dry vessel suitable for marine transportation and shall not use tramp vessels.

7.2.2 The goods/material will be shipped/dispatched with all care and diligence at their risk & cost and goods to be stored below deck. Accordingly, the supplier shall be responsible for all damages/losses during inland and marine transportation from the supplier's plant until arrival at Karachi port.

7.2.3 To provide as part of its work all services and functions related to handling, loading, unloading, lashing and securing in ship's holds and all costs, charges and expenses of which shall be included in the purchase order/contract price, unless otherwise specified.

7.3 In case of FOB order/contract, the supplier's obligations shall be over after the goods have crossed the ship's rails. The co-ordination, scheduling and lining-up for a PNSC vessel shall be the obligation of the supplier.

7.4 The supplier shall reimburse the Company all additional duties, taxes and other such charges paid by the Company on account of short shipment by the supplier for all items subsequently shipped on a no-charge basis or otherwise by the supplier. The supplier shall also reimburse the Company all additional duties, taxes and other such charges paid by the Company on account of incorrect invoicing by the supplier.

7.5 Shipment shall be deemed to have been made when the supplier has shipped the goods against a clean bill of lading and all other such documentation, as specified in clause 9.3 & 9.4 appearing next in sequence) have been furnished to the Company.

7.6 The supplier shall ensure that all above mentioned acts and other incidental and ancillary functions are conducted in accordance with sound and acceptable engineering practices. The Company shall be entitled to oppose any incorrect or inadequate practice adopted by supplier in this respect and the supplier shall take corrective action/measure forthwith to correct such omissions. If any goods are discovered to be damaged or unacceptable at the point of loading, the supplier shall be responsible for replacement free of all charges and costs to the Company within the delivery period specified in the purchase order/contract.

8. Insurance:

8.1 All goods supplied under the purchase order/contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in delivery clause 7.

8.2 Marine Insurance shall be the responsibility of the Company unless otherwise specified.

8.3 The supplier shall advise the Company by fax at least seven (7) days prior to the expected date of shipment, the following particulars:-

8.3.1 Name of the vessel and of the shipping company.

8.3.2 Age of the vessel (which should be less than 20 years).

8.3.3 Lloyds 100A1 or equivalent classification of the vessel.

8.3.4 ETD from Port of dispatch and ETA at Karachi

8.3.5 FOB/C&F value of the consignment.

The above information shall also be transmitted to the Company's underwriters, M/s. National Insurance Corporation by fax No. 0092-21-9202779 and to the Company referring Policy No. NIF/M/K/OP/002/73.

9. Payment:

9.1 Payment of FOB/C&F prices shall be made in the currency of bid through an irrevocable letter of credit (L/C) established in favor of the supplier, negotiable through the bank of their choice. Bidder shall indicate full name and address of the negotiating bank and the place at which they wish to negotiate the letter of credit. All bank charges outside Pakistan will be on supplier's account and all bank charges within Pakistan will be at Company's account. If confirmed letter of credit is required then charges for confirmation will be on supplier's account.

9.2 The supplier's request (s) for payment shall be made to the Company in writing as follows:

9.2.1 It shall be accompanied by an invoice describing, as appropriate, the goods delivered and the services incurred and by shipping documents submitted pursuant to Clause 9.4 hereof and upon fulfillment of other obligations stipulated in purchase order/contract.

9.2.2 Against shipping documents on arrival of ordered material at consignee destination. Bidder (s) will have to clearly mention, if they wish to opt for this mode of payment

9.3 The letter of credit shall be available upon presenting the following documents to the negotiating bank within 15 days of the date of the bill of lading covering shipment of each consignment:

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9.3.1-	Invoice	.....	4 copies
9.3.2-	Packing list	.....	4 copies
9.3.3-	Bill of lading " freight to be paid by consignee at destination" evidencing shipment in terms of the purchase order to Karachi-Pakistan made copies. out to order in the name of Co.'s bank, Notify party Sui Southern Gas Company Ltd.,	.....	3 originals & 6 non-negotiable
9.3.4-	Certificate of Origin (Verified/ Endorsed by Chamber of Commerce)	.....	2 copies
9.3.5-	Manufacturers test certificate/	.....	2copies Inspection report.

9.4 Without prejudice to the supplier's responsibility for providing documents mentioned as at 9.3.1 to 9.3.5 above to bank, the supplier shall forward the following non-negotiable documents directly to Company immediately after shipment so as to reach the Company at least 15 days prior to the arrival of the vessel at Karachi port.

9.4.1	-Invoice	.....	6 copies
9.4.2	-Bill of Lading	.....	6 copies
9.4.3	-Packing List	.....	6 copies
9.4.4	-Certificate of Origin (Verified /Endorsed by Chamber of Commerce)	.....	2 copies
9.4.5	-Manufacturers Test Certificate/	.....	2 copies Inspection Report.

9.4.6 The invoice to be exactly as per order/contract. Any deviation which render or cause the company to pay demurrage or any other charges with respect to clearance/handling etc. will be borne by the supplier.

9.5 No payment hereunder shall be deemed to be accepted by the Company of the goods covered by such payment nor release the supplier from responsibility thereof under the terms of the purchase order/contract.

9.6 If the Company is compelled to pay demurrage or storage charges or incurs any loss or suffers any damage at Karachi Port on account of non-compliance by the supplier of above requirements, the Company shall be entitled at their sole discretion to recover the same amount from supplier.

10. **Termination of purchases order by supplier:**

10.1 The supplier shall have the right to terminate the contract/purchase order if:-

10.1.1 The Company fails to establish the letter of credit within the stipulated period as required under clause 9.1 hereof after the supplier has made compliance with the provisions of clause 6.

10.1.2 The Company becomes bankrupt or insolvent or makes an assignment for the benefit of its creditors.

10.1.3 The Company is in default and breach of its obligation and liabilities under the contract/purchase order.

11 **Installation/Commissioning/Training:**

If installation/commissioning and training is required, the charges will be paid in Pak Rupee and will be subject to deduction of all local duty and taxes (as applicable).

12 **Vehicle (s) supplied by foreign manufacturer / principal:**

12.1 In case of supply of any type of vehicle (s) / earth moving vehicle (s) by the foreign principal / manufacturer. After clearance of vehicle from the custom, the local agent of the foreign supplier / manufacturer / principal will be completely responsible to get the vehicle (s) registered through Excise Department Government of Sindh and provide Original Registration book / Original Registration Invoice / Tax payment receipt / other related documents & provide the vehicle (s) number plate (s) to SSGC. Registration fee will be reimbursed by SSGC subject to submission of Government of Sindh Excise Department receipt.

12.2 The bidder / supplier shall quote only those vehicle (s) / which fully comply to Pakistani environment and can operate in Pakistan. The bidder should ensure that vehicle (s) consumable i.e (fuel/oil & lubricant/ spares) are easily available in Pakistan.

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SSGC

Annexure - A

On Non Judicial Stamp Paper of Rs. 50/- (Fifty) Per 100,000
Format of Bid Bond Guarantee

BANK GUARANTEE NO.....
DATE OF ISSUE.....
DATE OF EXPIRY.....
AMOUNT.....

Sui Southern gas Company Limited,
ST. 4/B, Block-14,
Gulshan-e-Iqbal,
Sir Shah Suleman Road,
Karachi.

TE # SSGC/FP/_____

Dear Sirs,

Bid Bond Bank Guarantee

In consideration of M/s.....hereinafter called the Bidder having submitted the accompanying bid & in consideration of value received from Bidder we hereby agree and undertake as follows:

- To make unconditional payment of Rs..... upon your written demand without further recourse, question or reference to the Bidder or any other person in the event of withdrawal of the aforesaid bid by the Bidder before the end of the period specified in the bid after the opening of the same for the validity thereof or if no such period to be specified within 90 days (150 days in case of Single Stage Two Envelope bidding procedure) after said opening and or in the event that the Bidder shall within the period specified therefore or if no period specified within 15days after the prescribed forms are presented to the Bidder for signature the Bidder shall fail to execute such further contractual documents if any, as may be required by the terms of the bid as accepted or on the Bidder failure to give the requisite Performance Bond as may be required for the fulfillment of resulting contract.

- To accept written intimation (s) from you as conclusive and sufficient evidence of the existence of a default of non-compliance as aforesaid on the part of Bidder and to make payment accordingly within 03 days of the receipt of the written intimation.

- No grant of time or other indulgence to, or composition or arrangement with the Bidder in respect of the aforesaid Bid with or without notice to us shall in any manner, discharge or otherwise, however, effect this Guarantee and our liabilities & commitments hereunder.

- This Guarantee shall be binding on us and our successors in interest and shall be irrevocable.

Yours faithfully,

(stamp and signature of the issuing bank)

Sui Southern Gas Co. Ltd. H.O. Gulshan-e-Iqbal Procurement Dept.

SSGC

Annexure - B

On Non Judicial Stamp Paper of Rs. 50/- (Fifty) Per 100,000
Format of Performance Bond Guarantee

BANK GUARANTEE NO.....
DATE OF ISSUE.....
DATE OF EXPIRY.....
AMOUNT.....

Sui Southern gas Company Limited,
ST. 4/B, Block-14,
Gulshan-e-Iqbal,
Sir Shah Suleman Road,
Karachi.

TE # SSGC/FP/_____

Dear Sirs,

In The Sum of Rs.....Account.....
To You in Karachi under the Purchase

In consideration of your having placed Purchase Order No..... dated..... On M/s..... called Supplier and in consideration for value, received from Supplier, we hereby agree and undertake as under:

1. To make unconditional payments to you from time to time as called upon or make an unconditional payments Rs..... Being Ten Percent (10%), of the value of the Purchase Order price mentioned in the said Purchase Order, on your written demand(s) without further resource, question or reference to Supplier or any other person, in the event of default or non-performance and / or non-fulfillment by Supplier of his obligations liabilities & responsibilities under and in pursuance of the said Purchase Order of which you shall be the sole judge.

2. To accept written intimation from you as conclusive and sufficient evidence of the existence of a default or breach as aforesaid on the part of Supplier and to make payment accordingly within 3 (three) days of receipt thereof.

3. To keep this guarantee in full force from the date hereof as specified in General or Special terms & conditions.

4. That on grant of time or other indulgence to amendment in the terms of the purchase order by agreement with Supplier in respect of the Performance of his obligations under and in pursuance of the said Purchase Order with or without notice to us, shall in any manner discharge or otherwise, however, affect this Guarantee and our liabilities and commitments there under.

5. This Guarantee shall be binding on us and our successors in interest and shall be irrecoverable.

6. This Guarantee shall not be affected by any change in the constitution of the Guarantor Bank or the constitution of M/s .....the Supplier.

Sui Southern Gas Co. Ltd. * Procurement Dept. * H.O Gulshan-e-Iqbal

Yours faithfully,

(stamp and signature of the issuing bank)

ANNEXURE - C

Tender Enquiry No. SSGC/...../...../...../

Integrity Pact

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BYTHE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS.10.00 MILLION OR MORE

Contract Number: Contract Value: Contract Title:

Dated:

[Name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

Without limiting the generality of the foregoing [Name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fee etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultations fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[Name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representative or warranty.

[Name of Supplier] accepts full responsibility and strict liability for making and false declaration, not making full disclosure, misrepresenting fact or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [Name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by [Name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

Sui Southern Gas Co. Ltd. Procurement Dept. H.O Gulshan e Iqbal

Tender Enquiry No. SSGC/FP/_____

Special Conditions of Tender Document

Note: *In case of any conflict between Special Conditions of Tender Document and any other terms & conditions, the Special Conditions of Tender Document will govern / prevail.*

1. Warranty / Guarantee Coverage

i) The successful bidder / supplier guarantee that the goods supplied against above tender enquiry are in all respect in accordance with the tender specifications & Purchase Order and that material used are in accordance with the latest approved standards and are of good workmanship / quality. Any item or part of item if found to be substandard or not meeting the specified criteria as per pre-shipment / post shipment inspection report, than in such as event the Supplier / Bidder hereby warrants and undertake to replace the same on Duty Delivery Paid (DDP) basis (INCOTERMS 2010) i.e. free of all cost including but not limited to transportation, taxes and levies. In case successful bidder / supplier failure to replace the defective item /remove the defect(s) free of cost within the period specified by the Purchaser, the successful bidder / supplier will refund the relevant cost including all other expenses incurred by the purchaser in this regard.

ii) The successful bidder / supplier must confirm that the warranty for no-consumable items will remain valid for 18 months and for consumeable items (i.e. Chemical, Battery etc.) will remain valid for 6 Months after the goods have been successfully delivered or commissioned.

iii) It is mandatory that the successful bidder / supplier will submit the attached undertaking at Annexure-II, duly filled, signed & stamped.

iv) In case where performance bank guarantee is not applicable, the supplier shall confirm that all supplied goods under the contract / purchase order are new, unused, of most recent or current models and incorporate all recent improvements in design and goods unless and otherwise provided in the contract / purchase order.

v) The Warranty Undertaking being provided by the local agent of the successful bidder (Principal) is required to be submitted at least on Rs.200/- Non-judicial Stamp paper and should be duly notarized / attested. In the event when this Warranty Undertaking is being submitted by the principal who is overseas resident in that case the same would required to be notarized by the notary public and duly attested by the Pakistan Embassy or High Commission in that particular jurisdiction. Needless, to mention that in both cases the Warranty Undertaking will be executed by the duly authorized representative of the local agent or the principal, as the case may be.

2. Bid Security:

a) Bid bond submission (2%) of the bid amount as mentioned in the clause 1.1 & 2 of Additional Terms for tender on F.O.B/C&F basis & 9 of General Terms & Conditions, to be treated as null & void, however, other contents of clause 1.1 & 2 of Additional Terms for tender on F.O.B/C&F basis & 9 of General Terms & Conditions will remain unchanged. The submission of fixed amount of Bid security is appearing in the Price Schedule/BoQ.

b) All the bidders are advised to furnish fixed bid security (Original Instrument) as per amount in Pak Rs. Or US$ appearing in price schedule/BOQ failing which their bid will be rejected.

c) Incase the bidder submit bid in the currency other than Pak Rs. Or US $ their bid bond shall be equivalent after the conversion to the amount of fixed bid bond given in Pak Rs. Or US$ as mentioned in Price Schedule/BOQ. The exchange rate (issued by the Treasury Management Group of the National Bank of Pakistan or the State Bank of Pakistan selling rate) prevailing at the time of bid opening date will be applicable.

d) The submission of fixed amount of bid security is also mandatory for all the bids valuing Rs.500,000/- or less.

e) The word lowest bidder or the lowest evaluated bid has been substituted to read as **most advantageous bid.**

e) Sub-clause 9.2 of the General Terms & Conditions to be treated as null & void, however, other contents of clause 9 will remain unchanged.

3- Method For Submission of Bid Bond(Under Single Stage Two Envelope Bidding Procedure):

In case of Single Stage Two Envelope Tenders the fixed bid bond as per clause#09 of General Terms & Conditions and Clause# 02 of Additional Terms for tenders on FOB/ C&F basis to be placed in the Technical Proposal. However, if the bid bond is placed in the Financial proposal will also be considered, Without submission of bid bond(either in Technical proposal or Financial proposal) the bid will be rejected.

4. Bid Validity:

All offers shall remain valid up to 120 days from the date of opening of bids and bid bond shall remain valid for 150 days.

5. Evaluation Criteria and Comparison of Bids

In accordance with SRO 827 (1) / 2001 bidders tendering for Engineering goods produced in Pakistan and those Engineering goods specified in CGO-11 and amendments thereof by the Central Board of Revenue or Engineering Development Board. The successful bidder shall be accorded a Price preference in rupees up to a specific percentage (in proportion to the value addition) of the lowest quoted landed cost of an item of foreign origin with similar specifications as mentioned in the tenders

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan

i) Provided that:-
   (a) The saving in foreign exchange is not less than the amount of price preference;
   (b) It is ensured that, in each case of such preference, the total import requirements for producing the supplies tendered for locally manufactured items has been duly indicated by the bidders.

ii) Price preference shall be allowed as under:-
   (a) Having minimum of twenty percent value addition through indigenous manufacturing, price preference shall be fifteen percent:
   (b) Having over twenty percent and up to thirty percent value addition through indigenous manufacturing, price preference shall be twenty percent, and
   (c) Having over thirty percent value addition through indigenous manufacturing, price preference shall be twenty five percent.

iii) For the above purpose, we will require a complete breakdown of ex-factory price for goods manufactured in Pakistan. Any offer not accompanied with this cost breakdown will not be allowed to receive the above price preference.

iv) Benefit of SRO 827 (1)/2001 shall be accorded to only those local manufacturers who are engaged in the manufacturing of goods specified in CG0 - 11 of 2007 or its latest version or as certified by the EDB.
However in case of offer on FOB basis, the landed cost to be determined in accordance with the following criteria be taken for evaluation in case of International bidders, and shall be taken for the purpose of comparison with the price quoted by local manufacturers, who shall also be accorded the price preference in terms of SRO 827 (1)/2001. **The landed cost determined in accordance with the afore said criteria shall be taken for bid evaluation in case of international bidders, and shall be taken for the purpose of comparison with the price quoted by the local manufacturers. Example of landed cost for evaluation of the international bidders is given here under:**

EXAMPLE

S. No.	**Cost Components for computing landing cost of imported Engineering goods in terms of S.R.O 827 (1)/2001 in Pak Rupees.**
i.	FOB Value.
ii.	Sea Freight (Actual quoted by the bidder on the basis of PNSC rates, which shall be announced by the bidder at the time of opening of the bid).
iii.	C&F value (i + ii). (CFR value).
iv.	Insurance @ 1% of C&F Value given at iii above.
v.	CIF value (iii + iv).
vi.	Handling Charges @ 1 % of CIF Value given at v above.
vii.	Import Value (v + vi) for the purposes of levying Customs Duty.
viii.	Customs Duty at applicable rate, which shall be calculated on the import value given at vii above.
ix.	Duty Paid Value.
x.	Sales Tax at applicable rate, which shall be calculated on the duty paid valve given at ix above.
xi.	Duty & Sales Tax paid value (ix + x).
xii.	Withholding Tax at applicable rate, which shall be calculated on duty and sales tax paid value given at xi above.
xiii.	LC Charge@ 0.25% of FOB Value given at i above.
xiv.	Clearing Charges @ 0.25% of C&F Value given at iii above.
xv.	SED at applicable rate, Which shall be calculated on the import value given at vii above to be taken as nil as it stands withdrawn.
xvi.	Provincial Infrastructure Cess (at applicable rate) on %age of import value given at vii
xvii.	KPT Wharfage @ Rs.140 per cubic meter or the prevailing rate.
xviii.	Cranage Loading & Other Charges@ 0.25% of C&F Value given at iii above.
xix.	Inland Transportation Charges from Port to Coating Factory (From Port of final destination in case of products other than pipes, where coating is not required).
xx.	Cost of imported engineering goods (xi to xix).
xxi.	LESS: Handling Charges taken at Sr. No. vi (Notional Value taken for calculating assessed value for purpose of calculating custom duty, sales tax and withholding tax by the customs authority).
xxii.	LESS: Sales tax taken at x above. (Adjustable as output tax).
xxiii.	LESS: With Holding Tax. (Adjustable against final assessed tax).
xxiv.	Total deductions (xxi + xxii + xxiii)
xxv.	Net cost of imported engineering goods (xx minus xxiv)

v) Foreign bidders are essentially required to submit letter of PNSC for ocean freight transportation rate for break bulk/hedges from their local agent.

vi) Please indicate approximate shipping specification, i.e. weight and measurements of the packages/bundles and also total gross weight (in terms of metric tons), and total gross volume (in terms of cubic meters) of each consignment separately.

vii) For evaluation of bids customs duty, taxes and all other charges prevailing on the date of public opening of bids will be used, where applicable.

viii) For the purpose of price comparison and evaluation of bids, financial charges will also be added to arrive at a landed cost, which will inter-alia include, mark up and L/C opening charges etc.

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ix) If the local manufacturer becomes the lowest evaluated bidder after Price Preference, order will be placed at the price (landed Cost) quoted by the lowest evaluated international bidder. In case the local bidder does not accede to the request of SSGCL for best negotiated rates at par with those received from International bidder for particular item(s) then, the order will be placed on the lowest evaluated international bidder.

x) "Price Preference" shall not be in "Value Terms" it should only be for the sake of reference for comparison purposes (local & foreign bids).

xi) Bank details shall be mentioned by the bidders for the purpose of opening LC/ Payment.

6. **Declaration / Integrity Pact / Certification:**
it is required to be submitted by the Successful Bidder on their letter heads after issuance of Purchase Order (PO) or Letter of intent (LOI) for the value of Rs.10,000,000/- (Ten Million) or above in case of local bidder and US$ 100,000 & above in case of foreign bidder.
Submission the declaration as at ANNEXURE-C is a mandatory requirement for successful bidder.

7. **Third Party Pre-Shipment Inspection Criteria / Scope of Work as given in theTender Documents will be followed at the time of Third Party Inspection, which will be carried out by SSGC nominated Third Party Inspection Firm in case the order value exceeds US$100,000 except screwed pipe fitting tenders.**

8. ***"The successful Bidder shall provide the revenue stamps and copy of challan, of value at the rate of twenty Five (25) paisa per every Hundred Rupees or part thereof of the amount of the purchase order, or at the prevailing rate as specified by the Government of Province of Sindh." Further as per Government of Sindh Board of Revenue notification NO.CIS/SWB/BOR/R&T-17/2022-808 dated 08-06-2022 all judicial and non-judicial stamp paper of the denomination of rupee five hundred and above shall be exclusively on e-stamp.***

9. *Bank Guarantee (Bid Bond Guarantee/Performance Bank Guarantee) will be made on Non-Judicial stamp paper at the prevailing rate as specified by the respective Provinces. Further the bidder/contractor submitting the Bid Bond guarantee/Performance Bond guarantee being prepared by the State Bank's schedule banks should ensure that there should be no deletion/insertion/alteration/modification of any terms in the Bid Bond/PBG guarantee format as given in the tender document or else bid will be liable for rejection.*

10. ***"Original counter slip of token which is issued with original tender document to be attached on the TOP of envelope at the time of bid submission."***

11. **Cancellation of Purchase Order**
In case the supplier fails to deliver the material within the specified delivery schedule as given in Purchase order (P.O.) and maximum upto 240 days after the expiry of the specified delivery schedule as per Purchase Order, the Purchase Order may be treated as cancelled at supplier's sole risk & cost. However, for the sake of clarity liquidated damages (Clause-27 of General Terms Conditions) and Default by Supplir (Clause-28 of General Terms Conditions) will be treated as given in the General Terms & Conditions of the tender documents.

12. **Correct Postal Address**
Bidders are essentially required to provide coorect and latest postal, e-mail & web addresses, phone/cell/fax numbers at the time of purchase of tender documents for effective and timely communication, failing which in event of any non-delivery of information / communication the procuring agency will be considered as non-responsive.

13. In case the local agent requires to offer bid from more than one principal / Manufacturer, it is mandatory to purchase separate tender document for each principal / Manufacturer, failing which the bid submitted with the original tender document will only be accepted and the bid with photocopy of tender document will be rejected.

14. ***Blacklisting Mechanism of Suppliers and Contractors and their Local Agent:***
Black listing mechanism is attached separately in the tender documents which will become an integral part of Tender Documents and now be followed / enforced in true letter & sprit and supersede the Black listing terms as mentioned in the General Terms & Conditions.

15. *The Successful Contractor(s) / Supplier(s) / Consultant(s) shall submit a copy of Professional Tax Certificate with their Invoices / Bills failing which the payment will not be released.*

16. **Authentications of Performa Invoice / Authority Letter and other documents by the Principal / Manufacturer:**
The Authentication of Authority Letter and Performa Invoice will be obtained from the Principal / Manufacturer as and when required. If the authentication not received within the stipulated time frame the bid will be liable for rejection and the Bid Bond / Earnest Money will be encashed.

17. ***Bid Bond & PBG (Performance Bank Guarantee) for Proprietary Tenders***
In case of proprietary Tenders, the Bid Bond & Performance Bank Guarantee (PBG) are not required / Applicable.

18. ***Any Bidder who change / amend the BOQ / Price Schedule (description / Bid Form, Quantity, UOM etc.) will render the bid as conditional bid and will be liable for rejection.***

19. ***Delivery Schedule will commence after the opening of Letter of Credit (LC). In case the bidder does not submit the performance bond as specified, the delivery time of goods shall be deemed to have commenced 10 days (15 days in case of import) from the issuance of letter of intent / prchase order. The proceeds of the performance bond shall be payable to the Company as compensation for any loss resulting from the supplier's failure to complete its work under the purchase order / contract.***

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20. **In the event of release of Performance Bank Gurante (PBG) after its encashment, the amount of the PBG to be released will be converted in Pak Rupees at the exchange rate prevailing at the time of encashment. The amount so converted will be released in Pak Rupee (PKR) to the foreign bidder or to their local agent duly authorized by the foreign principal.**

21. **SSGC will not pay invoices if they are turned in after 6 months of work completion / material delivered.**

22. *As per FBR Regulations Ref# C.No.4 (24) IT- Budget/2021-142150-R, Dated: 23rd September, 2021 to make the payment online. Therefore, all the local manufacturers are required to provide their only one Bank Account number (IBAN number) on the 'FORM-X' attached duly signed & stamped as one time information, which shall be firm (not changeable) for all the future payment transactions.*

23. **It is mandatory for the bidders to follow all the terms and conditions given in the tender documents without any addition / deletion / amendment and submit the bid accordingly. Therefore, in this context, the bidders are requested not to give their own terms and conditions as it tantamount towards the conditional bid. Otherwise their terms and conditions will not be considered and the Purchase Order / Contract will be awarded based on only as per SSGC tender terms and conditions.**

24. **Payment:**

The supplier after delivery of goods and its acceptance shall submit invoice to Finance Department of the Company, containing following information i.e:

(a) Purchase order No. & date	**(b) Items**	**(c) Quantity**	**(d) Price**	**(e) Invoice value**
(f) Point of delivery	**(g) Delivery challan indicating delivery date, etc.**			
(h) Supplier(s) are required to submit signed and stamp acknowledgement slip, Sales Tax return, Annex "C" & Annex "I" (whichever applicable) in which Sales Tax (of relevant Sales Tax invoice) is paid.				

Payment will be made within 30 days of completion of stated requirements.

25. **Joint Ventures:**

In the event that the bidder is bidding as a Joint Venture, the Company will require the joint venture agreement duly executed by the parties to the Joint Venture to be submitted with the bid. The joint venture parties shall also furnish an undertaking to be jointly and severally liable for all liabilities arising out of obligation under the Purchase Order / Contract. The, Joint Venture agreement of the parties must specify share of each partner and name of the lead partner along with their registration with the FBR, SST and BST as the case may be failure to specify these two narrations the joint venture agreement will not be entertained.

26. *In case the insurance policy submitted by the contractor is expired during the execution of job, it is the responsibility of the user department to coordinate with the contractor to get it renewed/updated till the period the job is completed/commissioned.*

In case the job is not completed within the given time as per tender terms and the insurance policy submitted by the contractor expires, the contractor is liable to get this insurance policy renewed / updated immediately till the period of the job is completed / commissioned as per tender terms failing which the contractor will be responsible for any loss to SSGC.

27. *Bidders can quote their rates on both i.e. Price Schedule as well as Bill of Quantity (BoQ).*

28. *Company reserve the right to award the Purchase Order /LOI to the most advantageous bidder.*

29. *As per SRO 592(I)/2022 of PPRA Regulations, for Procurement Contracts/Purchase Orders worth of Rs. 50 million and above, bidders/contractors are required to submit the Beneficial Owner's Information for Public Procurement Contracts/Purchase Orders (Annexure-I).*

30. *Incase quoted item(s) falls under SRO No. 604 (see attachment) i.e. Solar Power System, PV Module/Cells and allied accessories/parts/spares etc. - then in that case supplier is responsible to fully comply stated SRO and to arrange, provide and bear all associated costs for all necessary test reports, certificates, pre-shipment inspection reports, other documents etc. (as mentioned in SRO). Further, Pre-Shipment Inspection should be from approved companies as mentioned in Appendix H of Import Policy Order (see attachment).*

31 Fixed Bid Security – Alternative Bid

A bidder cannot submit two bids/offers with a single fixed bid security/pay order. However, the alternative bids/offers with separate fixed bid security/pay order can be accepted, failing which the bids will be liable for rejection. In case the bidder quote different make/brands/model that will also be considered as an Alternative bid/offer and require to submit separate Bid bond for each make/brand/model.

32. Bidder will be blacklisted and henceforth cross debarred for participating in respective category of Public Procurement proceedings for a period of (not more than) six months, if fail to abide with a bid securing declaration (which is an integral part of tender document), however, without indulging in corrupt and fraudulent practices, if in breach of obligation(s) under the Bid conditions:

a) The bidder have withdrawn or modified their bid during the period of bid validity as specified in the tender terms.

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b) Having been notified of the acceptance of bid by procuring agency during the period of bid validity (i) failure to sign the contract or accept purchase order (ii) fail or refuse to furnish the performance security or to comply with any other condition as mentioned in the tender document.

33. Wherever the "Rate Only" is mentioned (either on BOQ or anywhere in tender documents) the same shall only be applicable not exceeding 15% of the original procurement for the same items as given in the BOQ for package basis. In case the requirement is on item wise basis (not package basis) then not exceeding 15% of the original Procurement for the same items (on item wise basis) as given in the BOQ.

34. Lots: In case when the tender is floated on LOT basis, following clauses to be applied:

a) The bidder(s) are essentially / mandatorily required to submit fixed bid bond as mentioned in the bid form/BOQ/Invitation to Bid. Separate fixed bid bond to be submitted against each individual LOT and its validity to be 150 days at the time of opening of technical proposal.

b) Evaluation for each LOT will be carried out separately. Each LOT will be awarded separately.

35. For open competitive bidding if the most advantageous bidder is new local manufacturer, 10% trial order will be placed and remaining 90% order will be awarded to the next most advantageous bidder at their own quoted rates.

36. Subsequent to the issuance of Purchase Order/LOI, successful bidder has to submit 10% Performance Bank Guarantee of the Purchase Order/LOI value unless & untill specified in the Tender Documents. Clause# 16.1.5 mentioned in General Terms & Conditions to be treated as null & void.

37. Where the Pre-shipment inspection is applicable and incase of partial shipment is required by the bidder the cost of the 1st Pre-shipment inspection will be borne by SSGC, whereas, cost of the 3rd Party inspection for the remaining shipment(s) will be borne by the bidder/manufacturer.

38. Purchase order value mentioned in the clause # 6 of sub-clause # 6.1 (Performance Bond) of Additional Terms for Tenders on FOB/C&F basis (Section-1A) to be read as **US $ 10,000** instead of US $ 25000. However, other contents of clause & sub-clauses of 6 (Performance Bond) of Additional Terms for tender on F.O.B/C&F basis will remain unchanged.

39. Redressal of Grievances And Settlement of Disputes:

- Any bidder feeling aggrieved by any act of the procuring agency after the submission of his bid may lodge a written complaint concerning his grievances within seven days of announcement of the technical evaluation report and five days after issuance of final evaluation report.
- In case, the complaint is filed against the technial evaluation report, the GRC shall suspend the procurement proceedings.
- In case, the complaint is filed after the issuance of final evaluation report, the complainant cannot raise any objection on technical evaluation of the report. Provided that the complainant may raise the objection on any part of the final evaluation report in case where single stage single envelope bidding procedue is adopted.

40. The sub clauses 33.2, 33.4 & 33.5 of clause 33 of General Terms & Conditions to be treated as null & void.

41. All the bidders are allowed to participate in the subject procurement without regard to nationality/origin, except bidders of some nationality/origin, prohibited in accordance with policy of the Federal Government. Following countries are ineligible to participate in the procurement process:

- India
- Israel

42. In Open Competitive Bidding Procedure where the quoted price is less than Rs. 500,000/- the Bid Bond will be retained in lieu of PBG.

43. In case the Bid Bond is not required, the bidder must submit the Form of Bid-Securing Declaration attached with the Tender Document else the Bid will be liable for rejection.

44. All Tenders floated through EPADS are to be governed by S.R.O. 296(I)/2023 dated: March 8, 2023 "E-Pak-Procurement Regulations 2023". In case of any conflict between SSGC Tender Terms / Instructions to Bidders and the PPRA EPADS Rules, the S.R.O. 296(I)/2023 will prevail.

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45. **Samples:**

When sample submission is required. Suppliers/bidders must submit samples:

a) Along with the bid, if stated in the tender documents.

b) Within the time specified in the tender.

c) Upon request from the User Department for technical evaluation through official email/ letters.

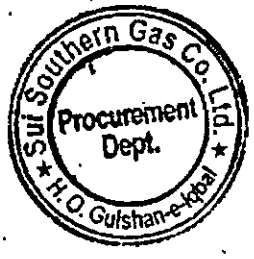
SAMPLE SUBMISSION LOCATION/ DEPARTMENT:

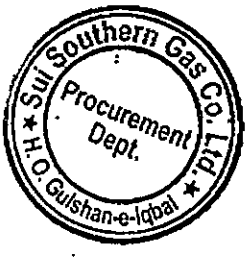
All samples must be submitted to the Procurement Department - Tender Room, SSGC Head Office with Duly filled in form "Y" attached in the tender document. Samples submitted other than the Procurement Department - Tender Room, SSGC Head Office will not be considered/accepted.

The supplier/bidder must:

- Fill in all required details (e.g., Tender No., Bidder Name, and Sample Description).
- Attach supporting documents (if required).
- Submit the completed Form-Y along with the sample.

In absence of any of the above stated requirements the Samples will not be considered/accepted.





PROCUREMENT OF 3LPE COATED LINE PIPE,

Sizes: 24" Dia. x 0.375" W.T. (PSL-2)

TENDER ENQUIRY NO.SSGC/FP/PT/14560

Special Terms & Conditions

In case of any conflict between the terms specified below and elsewhere (tender documents), the terms given hereunder will supersede:

1. Sui Southern Gas Company Limited, herein after referred to as the Company (purchaser) registered in Pakistan intends to procure subject goods on FOR, FOB/C&F basis from local and foreign manufacturers / bidders (having valid API accreditation), as specified in the tender documents. The procurement will be financed from the Company's own resources.

2. Complete set of Tender Documents may be collected on submission of a written application to the General Manager (Procurement), Sui Southern Gas Company Limited (Address: SSGC House, Sir Shah Suleiman Road, Gulshan-e-Iqbal, P.O.Box No.17989, Karachi-75300 Phone No.99021024 Fax No.92-021-99231583 (www.ssgc.com.pk.) and upon payment of Rs.2,000/- (Rupees One Thousand) by pay order/bank draft, drawn on a commercial bank operating in Karachi..

   2.1 Fixed Bid Bond as mentioned in the price schedule shall be enclosed with technical proposal, however fixed bid bond enclosed with financial bid is also acceptable. Further, if fixed bid bond not found either in technical proposal or in financial proposal the bid will be rejected. The Bid Bond shall remain valid for 150 Days.

   2.2 When bidder submits bids on behalf of different manufacturers/coating applicators, a separate bid bond for each individual bid is required or else bid will be liable for rejection. Likewise for tender when bidder submit alternative bids a separate bid bond for each individual bid is required or else bid will be liable for rejection.

   Please note that in case if the bid bond validity fall short of 150 days due to extension in bid submission date, the bidders are liable to extend the bid bond validity upto 150 days within 30 days of the opening of technical proposals.

3. The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or submission of Bid not substantially responsive to the Bidding Documents in all respect will be liable for rejection of Bid

4. Documents Comprising the Bid
   The Bid prepared by the Bidder shall comprise the following components

   - Bid Form / Price Schedule duly filled, signed and stamped.
   - Documentary evidence that the Bidder is qualified to perform the contract if its bid is accepted.
   - Bid Security furnished as per clause # 12 or Annexure 'A' of tender documents.

5. The Bidder shall complete and submit one original and one copy of the Bid Form and the appropriate Price Schedule furnished in the Bidding Documents. The bidder is also required to submit the complete set of tender documents duly signed with stamp & date on each page mandatory along with the bid.

6. Bid Validity:
   All offers shall remain valid up to 120 days from the date of opening of bid. All other requirement of Clause 7 of General Conditions (Section – 1) shall remain un-changed.

7. Bid Prices
   a. The Bidder shall complete the Price Schedule included herein, stating the unit prices, total cost (per item and total bid amount) of the Goods to be supplied under the Contract.
   b. Prices quoted in the Price Schedule should be entered separately in the following manners:-

   For Goods to be offered from Outside the Purchaser's Country.

   SSGC is a public sector Organization and as per directive of the Government of Pakistan, shipment of imported material be only through PNSC Vessel, hence commercial evaluation will be carried out on the basis of freight of PNSC (obtained by the bidder) only.

   a. the price of the Goods, quoted FOB port of shipment and
   b. the price of the Goods, quoted C&F Karachi (freight of PNSC) in the Purchaser's Country.
   c. The breakdown of prices on FOB should be furnished at (Annexure-E).

   Note: Sea freight (Actual quoted by the bidder on the basis of PNSC rates) for ocean freight transportation rate for break bulk / hedges would be announced at the time of opening of Commercial Proposal.

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For Goods to be offered within the Purchaser's Country.

Break down of prices (quoted in the Price Schedules) by local manufacturer shall be mandatory and be given separately in the following manners:-

- The price of the goods quoted ex-factory, loading, lashing and transportation charges from Factory to SSGC – designated Site/Coating Factory/Dumps. Quoted price should include all local other taxes except GST.
- Local value addition (in Rupees) on the imported raw material.
- Applicable custom duty in case of Imported H.R. Coil.
- **Bidders shall submit price break-up of goods offered as per ANNEXURE – D.**

8. Bid Currencies

- The local manufacturers are required to quote their offer in local currency (PKR) on FOR basis. However, local manufacturers are allowed to bid in foreign currency, only to the extent of imported component i.e. HR Coil which will be paid in equivalent Pak Rupee, calculated using the Interbank Selling Rupee/Dollar exchange rate (issued by the Treasury Management Group of the National Bank of Pakistan) prevailing at the time of filling of first Bill of Entry per vessel, as it appears on respective Goods Declaration (GD)..

- Foreign bidders are required to quote in Bidder's Home Currency or USD. (FOB/C&F/FOR)

- The bids shall be evaluated using interbank Dollar – Rupee exchange rate as on the day of public opening of Technical Proposal (issued by the Treasury Management Group of the National Bank of Pakistan/ State Bank of Pakistan).

9. Documents Establishing Eligibility of the Bidders and the Goods:

The Bidder shall furnish valid API certification from American Petroleum Institute, USA & ISO 9001 from internationally recognized organization, satisfactory to the Purchaser establishing both the Bidder's eligibility to bid. For coated Pipe the manufacturer shall also provide documentation with the bidding documents for in house quality program for 3 layer PE coating shall confirm to anyone of the quality control products, i.e. API Spec. Q1 or API ISO 9001.

10. Documents Establishing the Bidder's Qualifications to Perform the Contract:

The documentary evidence of the Bidder's qualifications to perform the Contract, if its Bid is accepted shall establish to the Purchaser's satisfaction prior to award of Contract.

- That, in case of a Bidder offering to supply Goods under the Contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the Good's manufacturer or producer to supply the Goods to or in the Purchaser's country.

- Company reserves the right to check and verify the Bidder's financial, technical and production capability to perform the contract.

11. Documents Establishing the Goods Conformity to the Bidding Documents :

The documentary evidence of the Goods conformity to the Bidding Documents may be in the form of literature, drawings and data and shall furnish.

- A detailed description of the Goods essential technical and performance characteristics as well as an original printed copy of technical literature or authenticated and legible photocopies of technical literature must be submitted together with the bid. In case the Bid is not supported by original or authenticated technical literature or the accompanying literature does not support the specifications as quoted in the Bid then the Purchaser reserves the right to reject such Bid.
- A clause-by-clause commentary on the Specifications, demonstrating the Goods responsiveness to those Specifications or a statement of deviations and exceptions to the provisions of the Specifications.
- For purposes of the commentary to be furnished pursuant to above, the Bidder shall note that standards for workmanship, material and equipment and references to brand names or catalogues numbers, designated by the Purchaser in the Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute other authoritative standards, brand names and/or catalogue numbers in its Bid provided that it demonstrates to the Purchaser's satisfaction that the substitutions are equivalent or superior to those designated in the Specifications.

12. Bid Security

a. The Bidder shall furnish as part of its Bid, a bid security in the amount equal to Fixed Bid Bond as enumerated in the price schedule

   - In the event of bid bond validity following short of the prescribed period of 150 or 180 days as the case may be either (i) due to extension in the bid submission date or (ii) where so required by the procuring agency, then in such an event it shall be mandatory on the bidder to extend the Bid Bond Validity upto 150/180 days within 30 days of the opening of technical proposal / bid, and / or where so required by the procuring agency.

b. The bid security shall be denominated in the currency of the Bid or any other freely convertible currency except that bidders from Pakistan may furnish the bid security in Pak Rupees (local agent of foreign bidders

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can also submit bid bond in Pak Rupees). It shall be valid for thirty (30) days beyond the validity of the Bid and shall be in one of the following forms:-

i. Bank Guarantee issued by a scheduled Bank in Pakistan acceptable to the Purchaser in the form provided in the Bidding Documents (Annexure – A).
ii. Pay Order issued by a local commercial bank or branch of a foreign bank in Pakistan.

c. Any Bid not secured above will be rejected by the Purchaser as non-responsive.

d. The Purchaser reserves the right to retain the bid security submitted by the Bidder until the Purchaser enters into an agreement or until 150 days after bid opening whichever is earlier.

e. The bidder(s) are essentially / mandatorily required to submit fixed bid bond as mentioned in the bid form/BOQ along with the technical proposal against each individual lot and its validity to be 150 days at the time of opening of technical proposal.

f. In case if the bid bond validity fall short of 150 days due to extension in bid submission date, the bidder(s) are liable to extend the bid bond validity upto 150 days within 30 days of the opening of technical proposals.

g. The successful Bidder's bid security will be discharged/returned upon the Bidder's executing the Contract, and furnishing the performance security.

h. The bid security / bid bond will be forfeited if a bidder withdraws the bid during validity period specified by the bidder or if successful bidder fails to:
   - Accept purchase order,
   - Furnish performance guarantee in accordance with clause # 20 of Special Terms & Conditions
   - Supply material as per requirement and delivery schedule.

13. Opening of Bids by Purchaser:

a. The Purchaser will open Technical Proposal in the presence of Bidder's authorized representative who may wish to attend on the date/time as mentioned in 'Invitation for Bid' at the Purchaser's Office located at the address stated in tender. The Bidder's representatives who are present shall sign a bid opening/bidder's attendance sheet/register evidencing their attendance.

b. The Bidder's name, prices of their submitted bids all discounts offered, modifications and bid withdrawals and the presence or absence of the requisite bid security and such other details as the Purchaser at its discretion may consider appropriate will be announced and recorded at the time of financial bid opening.

c. The comparison of bids shall be of the ex-factory, ex-warehouse, off the shelf price of the Goods to be offered from within the Purchaser's country (such price include all costs as well as duties/taxes paid or payable on components and raw material incorporated or to be incorporated in the Goods), and the C&F (port of entry) price of the Goods offered from outside the Purchaser's country plus the custom duties/taxes, clearance, inland transportation and insurance etc. The multiplier to be applied to the C&F price of the Goods from outside the Purchaser's country shall be determined by the Purchaser in accordance with the prevailing tariff structure.

14. Evaluation Criteria and Comparison of Bids

In accordance with SRO 827 (1) 2001 bidders tendering for engineering goods produced in Pakistan shall be accorded a Price preference in rupees up to a specific percentage (in proportion to the value addition) of the lowest quoted landed cost of an item of foreign origin with similar specifications as mentioned in the tenders.

i) Provided that:-

(a) The saving in foreign exchange is not less than the amount of price preference;

(b) It is ensured that, in each case of such preference, the total import requirements for producing the supplies tendered for locally manufactured items has been duly indicated by the bidders.

ii) Price preference shall be allowed as under:-

(a) Having minimum of twenty percent value addition through indigenous manufacturing, price preference shall be fifteen percent:

(b) Having over twenty percent and up to thirty percent value addition through indigenous manufacturing, price preference shall be twenty percent, and

(c) Having over thirty percent value addition through indigenous manufacturing, price preference shall be twenty five percent.

iii) For the above purpose, we will require a complete breakdown of ex-factory price for goods manufactured in Pakistan. Any offer not accompanied with this cost breakdown as per ANNEXURE – D will not be allowed to receive the above price preference.

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iv) Benefit of SRO 827 (I)/2001 shall be accorded to only those local manufacturers who are engaged in the manufacturing of goods specified in CGO – 11 of 2007 or as certified by the EDB.

However in case of offer on FOB basis, the landed cost to be determined in accordance with the following criteria be taken for evaluation in case of International bidders, and shall be taken for the purpose of comparison with the price quoted by local manufacturers, who shall also be accorded the price preference in terms of SRO 827 (I)/2001. **The landed cost determined in accordance with the afore said criteria shall be taken for bid evaluation in case of international bidders, and shall be taken for the purpose of comparison with the price quoted by the local manufacturers.** Example of landed cost for evaluation of the international bidders is given here under

EXAMPLE

S. No.	**Cost Components for computing landing cost of imported Engineering goods in terms of S.R.O 827 (1)/2001 in Pak Rupees.**
i.	FOB Value.
ii.	Sea Freight (Actual quoted by the bidder on the basis of PNSC rates, which shall be announced by the bidder at the time of opening of the bid).
iii.	C&F value (**i** + **ii**). (CFR value).
iv.	Insurance @ 1% of C&F Value given at **iii** above.
v.	CIF value (**iii** + **iv**).
vi.	Handling Charges @ 1 % of CIF Value given at **v** above.
vii.	Import Value (**v** + **vi**) for the purposes of levying Customs Duty.
viii.	Customs Duty at applicable rate, which shall be calculated on the import value given at **vii** above.
ix.	Duty Paid Value.
x.	Sales Tax at applicable rate, which shall be calculated on the duty paid valve given at **ix** above.
xi.	Duty & Sales Tax paid value (**ix** + **x**).
xii.	Withholding Tax at applicable rate, which shall be calculated on duty and sales tax paid value given at **xi** above.
xiii.	LC Charge@ 0.25% of FOB Value given at **i** above.
xiv.	Clearing Charges @ 0.25% of C&F Value given at **iii** above.
xv.	SED at applicable rate, Which shall be calculated on the import value given at **vii** above to be taken as nil as it stands withdrawn.
xvi.	**Provincial Infrastructure Cess (at applicable rate) on %age of import value given at vii**
xvii.	KPT Wharfage @ Rs.140 per cubic meter or the prevailing rate.
xviii.	Cranage Loading & Other Charges@ 0.25% of C&F Value given at **iii** above.
xix.	Inland Transportation Charges from Port to Coating Factory (From Port of final destination in case of products other than pipes, where coating is not required).
xx.	Cost of imported engineering goods (**xi to xix**).
xxi.	LESS: Handling Charges taken at Sr. No. **vi** (Notional Value taken for calculating assessed value for purpose of calculating custom duty, sales tax and withholding tax by the customs authority).
xxii.	LESS: Sales tax taken at **x** above. (Adjustable as output tax).
xxiii.	LESS: With Holding Tax. (Adjustable against final assessed tax).
xxiv.	Total deductions (**xxi** + **xxii** + **xxiii**)
xxv.	Net cost of imported engineering goods (**xx minus xxiv**)

Note: Any other duty / tax / levy imposed or withdrawn by federal / provincial governments to be incorporated, with the approval of EDB in consultation with the concerned organization(s).

v) Foreign bidders are essentially required to submit letter of PNSC for ocean freight transportation rate for break bulk/hedges from their local agent.

vi) Please indicate approximate shipping specification, i.e. weight and measurements of the packages/bundles and also total gross weight (in terms of metric tons), and total gross volume (in terms of cubic meters) of each consignment separately.

vii) For evaluation of bids customs duty, taxes and all other charges prevailing on the date of public technical opening of bids will be used, where applicable.

viii) For the purpose of price comparison and evaluation of bids, financial charges will also be added to arrive at a landed cost, which will inter-alia include, mark up and other charges etc.

ix) In terms of SRO 827(1)/2001 and as clarified by Engineering Development Board (EDB) vide letter No. EDB.SRO 827/Tech-II dated 26.10.2011 that if the local manufacturer becomes the lowest evaluated bidder after Price Preference, order will be placed at the price (landed Cost) quoted by the lowest evaluated international bidder. In case the local bidder does not accede to the request of SSGCL for best negotiated rates at par with those received from International bidder for particular item (s) then, the order will be placed on the lowest evaluated international bidder.

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x) **"Price Preference" shall not be in "Value Terms" it should only be sake of reference for comparison purposes (local & foreign bids).**

xi) **Evaluation will be made on delivered price at designated location / Coating Factory for local bidder(s) and on landed cost (as per EDB formula) for foreign bidder(s). SSGC reserve the right to cancel / amend the quantities without assigning any reason.**

15. Contacting the Purchaser

No Bidder shall contact the Purchaser on any matter relating to its Bid or in respect of any other bid or any other provisions of the tender from at the time of bid opening to the time the Contract is awarded. Clarification may be sought before bid opening.

16. Purchaser's Right to accept or reject any or all Bids

The company reserves the right to accept and / or reject any offer or cancel the tender enquiry altogether or to extend closing date of this tender enquiry without assigning any reason whatsoever at any time prior to award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

17. Post qualification and Award

a. The Purchaser will determine to its satisfaction whether the Bidder selected as having submitted the lowest evaluated responsive bid is qualified to satisfactorily perform the Contract.

b. The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder.

c. To verify its technical and production capability, the Bidder must provide documentary evidence that the items offered have been in commercial production and that Goods of similar specifications have been sold and have been in satisfactory operation.

d. An affirmative determination will be a pre-requisite for Award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's bid.

e. Inspection of manufacturing facilities of lowest evaluated responsive local/foreign manufacturer will be carried-out by SSGC's nominated 3rd Party Inspector at the Cost of Company.

f. The Purchaser will award the Contract to the successful Bidder whose bid has been determined to be the most advantageous responsive bid, provided further that the Bidder is determined to be qualified to satisfactorily perform the Contract.

18. Purchaser's Right to Award the Contract to more than one Bidder:

The Purchaser may split the quantities and award the contract to more than one supplier based on the following grounds:-

- Production capacity / capability
- Schedule of existing purchase orders on the bidder.
- Bidders past performance.

19. Notification of Award

Purchase order of quoted material may be placed on fulfilment of conditions mentioned in the tender document.

20. Performance Bank Guarantee

a. The successful Bidder shall furnish the Performance Bank Guarantee @ 10% of PO value within 15 days after issuance of LOI or placement of Purchase Order as per format provided in the Bidding Documents valid up to:
   i) For local Manufacturer: 18 months after delivery of Line Pipe to SSGC designated location.
   ii) For foreign bidders: 18 month from FOB Shipment or 15 months after arrival of goods at SSGC's designated location, whichever is earlier.

21. Subcontracts:

a. The Supplier shall not subcontract all or any part of the Contract without first obtaining the Purchaser's approval in writing of the subcontracting and the sub-contractor.
b. The Supplier guarantees that any and all subcontractors of the Supplier for performance of any part of the work under the Contract will comply fully with the terms of the Contract applicable to such part of the work under the Contract. The Purchaser assent to appointment of sub-contractor/sub-contracting shall not relieve the Supplier of all obligations under the Contract.

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22. Country of Origin:

a. All Goods supplied under the Contract shall have their origin in eligible countries. (Issued / Endorsed by Chamber of Commerce)
b. For purposes of this Clause, origin shall be considered to be the place where the Goods were mined, grown or produced. Goods are produced when through manufacturing processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.

23. Patent Rights

The Supplier shall indemnify and hold the Purchaser harmless against all third-party claims of Infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof.

24. Guarantee

a. The Purchaser shall promptly notify the Supplier in writing of any claim arising under this Guarantee.

b. Upon receipt of such notice, the Supplier shall promptly repair or replace the defective Goods or parts thereof, without cost to the Purchaser other than, where applicable the cost of inland delivery of the repaired or replaced Goods or parts from the port of entry to the final destination.

c. Without prejudice to other clauses, the Supplier shall promptly correct at no cost to the Purchaser any defect in any work of correction performed, upon receipt of written notice of defect within twelve (12) months from acceptance of the corrected defect.

d. If the Supplier, having been notified, fails to remedy the defect (s) in accordance with the Contract, the Purchaser may proceed to take such remedial action as may be necessary at the Supplier's expense. The Supplier's Guarantee is without prejudice to any other right or remedies which the Purchaser may have against the Supplier under the Contract.

e. Any amount payable by the Supplier under this Clause may be recovered by the Purchaser by withdrawing from the Performance Security without having to notify or seek the approval of the Supplier.

*f. **In addition to the requirements of (a) to (e) above, in case of line pipe leak/failure detected at the time of hydrostatic testing of line pipe during construction, the Supplier shall pay to the Purchaser a lump sum amount of Rs.1,500,000/- or (US dollar equivalent) at a rate pursuant on bid opening date per leak on account of expenditure incurred by SSGC for locating / detecting leak including replacement etc.***

25. Termination for Convenience:

a. The Purchaser may by written notice sent to the Supplier, terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of work under the Contract is terminated and the date upon which such termination becomes effective.

b. The Goods that are complete and ready for delivery within thirty (30) days after the Supplier's receipt of notice of termination shall be purchased by the Purchaser at the Contract prices and on the other Contract terms. For the remaining Goods, the Purchaser can also opt to have any portion thereof completed and delivered at the contract prices and on the other contract terms.

26. Termination for Insolvency:

a. The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, without compensation to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. Notwithstanding the above, such termination will not prejudice or affect any right of action or remedy which as accrued or will accrue thereafter to the Purchaser

27. Termination for Default:

27.1 The Company may, without prejudice to any other remedy by written "notice of default" sent to the supplier, cancel the purchase order whole or in part; if:

27.1.1 The supplier fails to deliver any or all of the ordered quantity as per specified delivery schedule or any extension thereof granted by the Company
27.1.2 The supplier fails to perform any other obligation(s) under the "purchase order".
27.1.3 The Company during the delivery period has reasons to believe that the supplier will not be able to fulfill the obligations under the purchase order/contract.
The Company prior to exercising its right to cancel the purchase order/contract shall issue notice to the Supplier specifying the default(s) and the supplier shall submit an explanation within seven (07) days of receipt of such notice. If such explanation is not furnished within the stipulated time or if so furnished, is found to be unsatisfactory and/or the default(s) continues, purchase order/contract may be cancelled. The Company in addition to cancellation of purchase order/contract may suspend/cancel the enlistment of supplier.

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27.2 The Company shall have the right to terminate/cancel the contract/purchase order concluded between the supplier and Company; if:

27.2.1 The successful bidder fails to furnish the performance bond as under clause # 20 of Special Terms & Conditions thereof.
27.2.2 The supplier fails otherwise to perform, fulfill or comply with terms, conditions, regulations and requirements of the contract/purchase order to carry out the work in accordance with the provisions thereof or abandons the shipment.
27.2.3 The supplier becomes bankrupt or insolvent or makes an assignment for the benefit of its creditors.
27.2.4 One or more consignments of material delayed by a period of more than three months or non-supplied.
27.2.5 Rejection of manufacturing items as a result of observation by inspection team.
27.2.6 Penalty on higher rejection rate of supplied goods.

28. Taxes and Duties, Corporate/Insurance Tax:

a. The Supplier shall be entirely responsible for all taxes, stamp duties and other such levies imposed outside the Purchaser country.

b. All taxes of suppliers, its representation and employees including income tax and corporate tax shall be sole responsibility of the supplier.

c. Purchaser shall have the right to deduct tax at source at rate applicable to non-resident in accordance with income tax ordinance or any other law in force at the time of payment.

d. If supplier is not liable to pay tax under the income tax ordinance or is liable to pay tax at a lower rate than supplier shall obtain a certificate from the tax authorities in Pakistan to that effect. If the required certificate is not produced by the supplier prior to the date of payment, then the Purchaser shall deduct tax at source at rate applicable to non-residents from the gross payment due to supplier.

e. For Local Manufacturers:
In an event of any custom/excise duties or tax on any goods is imposed or increased, either by the provincial or Federation Government, the SSGCL shall not be liable to pay the amount so charged from the supplier/seller. The supplier/seller shall have no right to claim repayment or any from SSGCL paid by him on account of imposition of new custom excise duties or tax or increase in existing rate of custom excise duty or tax.

29. Handling and Transportation:

a. The Supplier shall be responsible for and shall provide as part of its work all services and functions related to handling, loading, lashing, securing, unloading and stacking up to the Delivery Point *at its own risk and cost. A*ll costs, charges and expenses of which shall be included in the Contract price, unless otherwise specified in the Special Conditions of Contract. The co-ordination, scheduling and lining-up for delivery of FOR Contract shall be the obligation of the Supplier. The supplier is responsible to complete all activities for handling and transportation as per recommended practice for truck transportation of line pipe API 5LT (Annex-F).

b. In case of C&F Contract, the Supplier shall be responsible for and shall provide as part of its work all services and functions related to handling, loading, unloading, lashing and securing in ship's holds upto the Delivery Point (Port) at its own risk and cost. All costs, charges and expenses of which shall be included in the Contract price, unless otherwise specified in the Special Conditions of Contract. The co-ordination, scheduling and lining-up for a PNSC vessel in case of C&F Contract shall be the obligation of the Supplier that line pipe has been placed in the vessel and truck as per recommended practices for transportation of line pipe on truck (API 5LT) and transportation on barges and marine vessels API 5LW third edition 2009 (Annex-G).

c. In case of FOB Contract, the Supplier shall be responsible for and shall provide as part of its work all services and functions related to handling, loading, unloading, lashing and securing in ship's holds upto the Delivery Point (Port) at its own risk and cost. All costs, charges and expenses of which shall be included in the Contract price, unless otherwise specified in the Special Conditions of Contract. The co-ordination, scheduling and lining-up for a PNSC vessel in case of FOB Contract shall be the obligation of the Supplier that line pipe has been placed in the vessel and truck as per recommended practices for transportation of line pipe on truck (API 5LT) and transportation on barges and marine vessels API 5LW third edition 2009 (Annex-G).

d. The Supplier shall ensure that all above mentioned acts and other incidental and ancillary functions are conducted in accordance with sound and acceptable engineering practices/*API STANDARDS*. The Purchaser and his agent shall be entitled to object to any incorrect or inadequate practice adopted by the Supplier in this respect and the Supplier shall take corrective forthwith to correct such practice.

e. If any Goods are discovered to be damaged or unacceptable, the Supplier shall be responsible for replacement free of all charges and costs to the Purchaser within the delivery period specified in the Contract.

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f. The Supplier shall reimburse the Purchaser all additional duties, taxes and other such charges paid by the Purchaser on account of short shipment by the Supplier for all items subsequently shipped on a no-charge basis or otherwise by the Supplier. The Supplier shall also reimburse the Purchaser all additional duties, taxes and other such charges paid by the Purchaser on account of incorrect invoicing by the Supplier.

g. The Supplier hereby covenants and guarantees that in a C&F/*FOB* Contract the Goods/Material will be shipped with all care and diligence at the risk and cost of the Supplier. The Supplier further guarantees that the Supplier shall be responsible for all damage/losses to the Goods/Material during inland and marine transportation from the Supplier's plant until arrival at Karachi Port.

h. The Supplier hereby guarantees that in the event of a C&F/ Contract, the Supplier shall use vessel suitable for marine transportation and shall not use tramp vessels.

i. The Supplier hereby covenants and guarantees that in a FOR Contract the Goods/Material will be loaded with all care and diligence at the risk and cost of the Supplier. The Supplier further guarantees that the Supplier shall be responsible for all damage/losses to the Goods/Material during transportation upto SSGC's designated Site/Coating Factory/Dumps or from sea port to Coating Plant in case of FOR through import. The Supplier's obligations will be over and above those laid down elsewhere in this Clause.

30. Delivery and Documents:

In case of Local Offer:

a. Delivery of Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser and the Goods shall remain at the risk of the Supplier until the Goods are properly lashed in the hold of the Trailer/Truck and delivered at SSGC's designated pipe dumps.

b. Deliveries shall be deemed to have been made when the Supplier has loaded the Goods against an invoice/delivery challan and all other such documentation, as specified in Special Conditions of Contract hereunder, have been furnished to the Purchaser.

c. The Delivery Tolerance will be ± 1% of the ordered quantity.

- The Supplier shall advise the Purchaser by fax at least seven (7) days prior to the expected date of delivery.

In case of FOB/C&F offer:

d. Delivery of Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser and the Goods shall remain at the risk of the Supplier until the Goods are properly stored and lashed in the hold of the vessel.

e. Shipment shall be deemed to have been made when the Supplier has shipped the Goods against a clean bill of lading and all other such documentation, as specified in Special Conditions of Contract hereunder, have been furnished to the Purchaser.

f. The Delivery Tolerance will be ± 1% of the ordered quantity.

31. Licenses and Permits:

a. The Supplier shall make all payments for royalties or fees in respect of letter of credit, patent, registered design, trademarks or names, copyright or other protected rights due or payable for or in connection with any matter or thing used or required to be used in the performance of the Contract or to be supplied under the Contract whether payable in lump sum or by installment or otherwise to those to whom they may be due or payable all such payments shall be deemed to have been included by the Supplier in the Contract price.

b. The Supplier shall fully indemnify and keep the Purchaser indemnified at all times against any action, claim, demand, charges, cost or expenses arising from or incurred by reason of any infringement and alleged trademark or traders name protected in Pakistan by the use or sale of the Goods and against all costs which the Purchaser may incur in any action for such infringement or for which the Purchaser may become liable in any such action.

32. Notices

a. All notices called for by the terms of this Contract shall be effective only at the time of receipt thereof and only when received by the parties to whom they are addressed to at the following address:-

Purchaser: Managing Director,
SSGC House,
Sir Shah Suleman Road,
ST 4 / B, Gulshan-e-Iqbal, Block 14
P.O. Box 17989
KARACHI - 75300
www.ssgc.com.pk

Supplier: _____

_____

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33. Inspection and Tests:

a. The Purchaser shall have the option of placing an independent Inspection Agency/Inspector and having inspection carried out by Purchaser's (Engineer (s)) to witness manufacture and ascertain or all tests specified by Inspector as per contract and the Supplier shall give reasonable notice to the Inspector/Purchaser's Engineer (s) of the time and manufacture/test is planned to be carried out/conducted during such period.

b. Where inspection is to be carried out through Third Party Inspection/Independent Inspection Agency, the cost of appointing such inspection shall be borne by the Purchaser. However all laboratory charges outside the factory for conducting test as per API will be responsibility of bidder.

The right of plant access, inspection, rejection, compliance etc will be in accordance with codes and standards as specified in the tender documents.

Upon receipt of all necessary information and the certificates and reports to be provided by the Supplier in respect of each consignment (and upon replacement of correction of any Goods rejected by the inspector under this Clause when such rejected Goods formed part of the consignment), the inspector shall issue an Acceptance Certificate upon being fully satisfied that the Goods conform strictly and completely with the Contract specifications.

The inspector shall further issue a Certificate upon being fully satisfied that Goods conforming to the Contract specifications have been loaded, stacked and lashed in accordance with acceptable ***recommended practices of API standards***. Any certificate issued by the inspector shall not release the Supplier of its obligations under the Contract. The term Inspector shall also include and means the Purchaser's Engineer(s) as well. Manufacturing facilities of foreign bidder, if determined lowest compliant would be carried out by SSGC's nominated 3rd party inspection firm.

c. The bidder (s) are also responsible to ensure safe transportation (ship / truck) of bare and coated pipe to the designated location as per recommended practices for transportation of line pipe through truck (API 5LT) and transportation of line pipe on barges and marine vessels API 5LW third edition 2009 (Annex-G).

34. Withholding / Income Tax

In case of Local Manufacturer the Purchaser will deduct applicable withholding tax and all similar taxes and duties it may be required to withhold in settlement of Supplier's invoices either through Local L/C or Online as per given IBAN number. The tax so deducted will be paid into the Government account and the Supplier may seek adjustment of same against his final yearly tax liability. Where the Supplier can produce a valid tax exemption certificate, such deduction will not be made.

35. General Sales Tax (G.S.T) for local manufacturers:

The Bidder shall be registered with General Sales Tax and a copy of valid G.S.T. registration certificate should be provided without which the Bid will not be considered.
Quoted price shall be inclusive of all taxes, except GST.

36. Raw Material / H.R. Coil

In case of raw material / H.R. Coil etc used for manufacturing of Pipe etc. supplier are required to submit complete detail of ex-stock availability / expected delivery of H.R. Coil. SSGC will not be responsible for any delay in delivery of line pipe due to late receipt of H.R Coils from the H.R. Coil Manufacturers to suppliers.

37. Payment of Exchange Rate Differential Amount

The payment of exchange rate differential amount to the local manufacturer shall be made in accordance with EDB-SRO 827(I)/2001-Tech-II office order dated: December 04, 2014.

The payment of exchange rate differential amount to the local manufacturer for imported H.R. Coil shall be made in equivalent Pak Rupees, calculated using the Interbank Selling Rupees Dollar Exchange Rate (issued by the Treasury Management Group of the National Bank of Pakistan) prevailing at the time of filing of first Bill of Entry per vessel, and on the date of bid opening.

For the purpose of calculation of exchange rate differential amount, insurance charges will be calculated at actual as they appear on respective bill of entry.

38. Destination:

SSGC's Site as specified in Freight Schedule for both local and foreign manufacturer.

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SCHEDULE OF REQUIREMENT AND BID FORM FOR BIDDERS OUTSIDE THE PURCHASER'S COUNTRY TENDER ENQUIRY NO.SSGC/FP/PT/14560

Sr.	Description	Country of Origin	Quantity	Unit Price FOB Port of Loading	Total FOB Cost COL (4 x 5)	Unit Price C&F Port of Entry Karachi	Total C&F Port of Entry COL (4 x 7)
1	2	3	4	5	6	7	8
1	LINE PIPE ERW/SAW/HLSAW API 5L GRADE X70 PRE-COATED [ ] 01329783 LINE PIPE 24" OD x 0.375" WT (PSL-2), PRECOATED (AS PER SPECS. ATTACHED)		6000 Meters				

Fixed Bid Bond @ (USD=7,200) OR (PKR=2,000,000).

Notes:

Having examined the Bidding Documents for the above Contract including the Specifications, the receipt of which is hereby duly acknowledged, we the undersigned offer to supply and deliver the Goods in conformity with the said Bid Documents including all addendums for the sum of (Total Bid Amount FOR/FOB/C&F in Words and Figures) or such other sums as may be ascertained in accordance with the Price Schedules attached hereto and made part of this Bid.

We undertake, if our Bid is accepted to commence and complete delivery in accordance with the Schedule of Requirements and Delivery Period provided in the Special Conditions of Contract.

If our bid is accepted, we will provide the Performance Security in the sum of (Amount) equal to 10 percent of the Contract price for the due performance of the Contract. We understand that our Bid Security will be forfeited if the Performance Security is not furnished within Fifteen (15) days of the receipt of the notice of award of contract.

We agree to abide by this Bid for the period of One Hundred & Twenty (120) days or any further extension from the date fixed for bid closing and shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this Bid together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

IMPORTANT

1. Prices given here in shall take into account all relevant factors including discount, if any.
2. Performa Invoice submitted by the supplier shall match with the price schedule,
3. The Price on FOB and C&F basis should be quoted separately as given above otherwise the bid may not be entertained.
4. Freight letter of Pakistan National Shipping Corporation (PNSC) must be attached with the bid.
5. Following information must also be mentioned in the bid.
   - Country of Origin
   - Port of Shipment
   - Estimated Gross weight / volume
6. The bidders are required to fill Price Breakdown Form at Annexure-E.

SIGNATURE OF BIDDER _____

NAME _____

NAME OF COMPANY _____

STAMP _____

DATE _____

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

SCHEDULE OF REQUIREMENT AND BID FORM FOR BIDDERS WITHIN THE PURCHASER'S COUNTRY TENDER ENQUIRY NO.SSGC/FP/PT/14560

Item	Description	Quantity (Meters)	Unit Price (Rs.)	Total Price (Rs.)
1	2	3	4	(3 X 4 = 5)
1	LINE PIPE ERW/SAWH/LSAW API 5L GRADE X70 PRE-COATED [ ] 01329783 LINE PIPE 24" OD x 0.375" WT (PSL-2), PRECOATED (AS PER SPECS. ATTACHED)	6000 Meters		

Fixed Bid Bond @ (USD=7,200) OR (PKR=2,000,000).

IMPORTANT:

In case of any conflict between the terms (forms) specified in tender documents and elsewhere, the terms given ***Special Terms & Conditions*** will supersede:

i. The price offered should be firm and irrevocable. However, bidders offering HR Coils manufactured by Pakistan Steel will have to provide documentary evidence of published rates of Pakistan Steel at the time of submission of bids. These documents would be got authenticated by SSGCL from PSM.

ii. Variation in line-pipe rate after bid opening date will be subject to adjustment to the extent of H.R. Coil price notified by Pakistan Steel.

iii. The bidders are required to submit break up of rates indicating per ton price/ meter of H.R. Coil (Pakistan Steel's). All other charges (including transportation of H.R. Coil, Bare Pipe conversion cost etc.).

iv. In case of any change in the published rates of H.R. Coil by Pakistan Steel, after bid opening and during the currency of order, the increase/decrease in price, as the case may be would be allowed without wastage to those bidders after 20 days of its revision, accordingly.

v. In case the manufacturer fails to supply the goods within the stipulated delivery period and seeks extension from the Company and that in the event of extension granted by the Company, in completion of the supply of pipe, in case the price of H.R. Coils is increased during the extended period for which delivery has been delayed by the manufacturer, no increase in price of H.R. Coils will be admissible and it will be the sole liability of the manufacturer to supply the pipe as per contracted prices.

vi. No escalation is applicable on line-pipe which are manufactured from imported H.R. Coil.

vii. Bidders are essentially required to provide an evidence of Coil purchases from PSM after escalation announced by Pakistan Steel failing which no escalation would be applicable.

viii. As per specification manufacturer will provide reports from independent laboratories of repute for mechanical properties and chemical analysis. If manufacturers have in-house facility of metallographic examination to the satisfaction of 3rd party inspector, samples need not be sent to outside laboratory. However, inspector could send random samples to outside laboratory at bidders cost and arrangements.

ix. If our bid is accepted, we will provide the Performance Security in the sum of (Amount) equal to 10 percent of the Contract price for the due performance of the Contract. We understand that our Bid Security will be forfeited if the Performance Security is not furnished within Fifteen (15) days of the receipt of the notice of award of contract.

x. Bidder (s) are to submit a certificate on Rs.100/= non-judicial stamp paper certifying that they are not blacklisted by any Government / Autonomous body and are not defaulted supplier (s).

SIGNATURE OF BIDDER _____

NAME _____

NAME OF COMPANY _____

STAMP _____

DATE _____

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Delivery Schedule:

i. **FOB/ C&F:**

The quantities of line-pipe required to be delivered in accordance with the schedule from the date of Opening of the Letter of Credit. Details are given here under:-

Delivery at Karachi Port

Detail	Quantity (Meters)	FOB	C&F
LINE PIPE ERW/SAWH/LSAW API 5L GRADE X70 PRE-COATED [1] 01329783 LINE PIPE 24" OD x 0.375" WT (PSL-2), PRECOATED (AS PER SPECS. ATTACHED)	6000 Meters	*Delivery within 120 days (or earlier) from the date of opening of letter of credit.*	*Delivery within 150 days (or earlier) from the date of opening of letter of credit.*

ii. **FOR (Local Manufacturer) :**

- **Delivery to start from 121 days after the placement of Purchase Order / the date of opening of operative LC and 6000 meters quantity of line pipe to be delivered by manufacturer and complete within 150 days after the placement of Purchase Order / the date of opening of operative LC. Unloading and stacking on wooden skids (6" x 6" x 9ft Long) & Wooden Wedges (3" x 3" x 3") provided by the bidder at designated dump location, i.e: (SSGC SMS Pakland). Late submission of PBG should not affect the delivery schedule.**

I/We have carefully read and under stood the specifications and terms & conditions of the above tender enquiry and fully agree.

SIGNATURE OF BIDDER'S REP: _____

NAME: _____

NAME OF BIDDER: _____

STAMP: _____

DATE: _____

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Breakdown of Prices
(For the Manufacturer within the Country)
Tender Enquiry # SSGC/FP/PT/14560

Exchange Rate Rs/$ Rs. _____

Item #		
Outside Diameter	mm	
	Inch	
Thickness	mm	
	Inch	
API 5L Grade		
Quantity	meters	
	MT	
Wpe	kg/m	
Sa	m^2/m	

Sr.	Description	Currency	Rate per Meter	Rate per ton
1	Hot Rolled Coil			
2	Custom Duty			
3	Additional Custom Duty			
4	Regulatory Duty			
5	Pipe Manufacturing Cost			
6	Any other charges (Specify)			
7	Imported Coating Material			
8	Coating Application Cost			
9	Total Manufacturing Cost (Pipe) Ex-factory			
10	Transportation to Site			
11	Profit Margin			
12	Selling Price			

Description	Per Meter	Per Standard Length	Per Tendered Quantity
Weight (KG)			

Rate / KG (PKR)	Rate / Ton (PKR)

In accordance with API 5L Clause# 9.14 & Sub Clauses (API 46th edition or latest version).

Note:

1. **Above Break-up is required to apply SRO 827 (1)/2001 in its true spirit.**
2. **SSGC reserve the rights to adjust the price from above break-up in case any item / services with-drawn / not utilized for e.g. if SSGC required Ex-factory delivery, the cost of transportation of bare pipe would be adjusted without seeking any concurrence.**
3. **Loading, lashing, transportation, unloading and stacking on wooden skids at designated delivery location would be responsibility of the local manufacturer (Includes all Cost).**

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

Breakdown of Prices
(For the Manufacturer outside the Country)
Tender Enquiry # SSGC/FP/PT/14560

Currency: _____ . _____

Item #		
Outside Diameter	mm	
	Inch	
Thickness	mm	
	Inch	
API 5L Grade		
Quantity	meters	
	MT	
Wpe	kg/m	
Sa	m^2/m	

Sr.	Description	Currency	Rate per Meter	Rate per ton
1	Hot Rolled Coil			
2	Pipe Manufacturing Cost			
3	Any other charges (Specify)			
4	Coating Material			
5	Coating Application Cost			
6	Total Manufacturing Cost (Pipe) Ex-Factory			
7	Transportation to Port			
8	Profit Margin			
9	Selling Price			

Description	Per Meter	Per Standard Length	Per Tendered Quantity
Weight (KG)			

Rate / KG	Rate / Ton

In accordance with API 5L Clause# 9.14 & Sub Clauses (API 46th edition or latest version).

Note:

1. **Above Break-up is required to apply SRO 827 (1)/2001 in its true spirit.**

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SSGC

Commercial Compliance Sheet

Name of Bidder:_____ Date of Bid Opening:_____

Terms	Commitment/Confirmation by the Bidder	Accepted/Non-Accepted by SSGC
Prices quoted are with and without custom duty on imported Raw Material/H.R. Coils., Welding Flux, Wire etc. separately		
Breakdown of rate of HR Coil, Production Cost, Coating, Duty / Taxes etc		
Prices quoted shall remain firm, irrevocable, fixed and valid until completion of the Contract and will not be subject to variation on any account		
Bid security in the amount as described in the clause 12 of Special Terms and Conditions.		
Bids shall remain valid for 120 days after the date of bid closing		
Payment Procedure		
Delivery Compliance		
(i) For Local bidders/manufacturers, If Payment made through Letter of Credit, all bank charges will be on account of supplier. Local LC will be opened inclusive of GST. **(ii) For Foreign Manufacturer all bank charges payable in Pakistan will be on account of SSGC where as all charges payable outside Pakistan will be on account of supplier.** **(iii) In case of foreign or local Letter of Credit, any charges on account of time extension of LC shall be borne by either supplier or procuring agency to whom such reason of extension are attributed.**		
Delivery of the line pipe shall be made by the supplier from the opening of operative LC / placement of PO. (for Local Manufacturer)		
All taxes, stamp duties and other such levies etc shall be supplier's responsibility.		
The quoted unit price & corresponding total amount shall be inclusive of all duties & taxes except General Sales Tax (GST) for imported coil.		
Technical Literature has been submitted.		
G.S.T registration valid certificate attached.		

Signature of Bidder
Date:
Official Stamp

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SSGC

Checklist for Bidders

Tender Enquiry # SSGC / FP / 14560

M/s: _____

Phone: _____

Cell No: _____

Fax No: _____

Please ensure, before submitting the bid, that following information/documents have been submitted / provided along your bid. Check (✓) appropriate box.

Sr. No.	Details of required information / documents.	Yes	No.
1	(Price Schedule) "Breakdown of Prices" and "Bid Form" are dully filled.		
2	Technical compliance sheet has been vetted.		
3	Fixed Bid Bond as specified in the tender document.		
4	Bid validity is 120 days after opening of bid.		
5	Delivery period has been specified.		
6	Country of origin of H.R. Coil.		
7	Standard Warranty/Guarantee (if applicable).		
8	Original Performa Invoice of Principal / Evidence of Import of Raw Material.		
9	Original technical literature (two copies).		
10	L/C confirmation charges (if desired by bidder) shall be borne by the supplier.		
11	If Payment made through Letter of Credit. L/C opening charges along-with any amendment attributable/at the request of suppliers shall be made at the suppliers cost.		
12	G.S.T. certificate should be attached		
13	There will be no deviation in the tender terms		
14	Technical and Commercial Proposal separately sealed in two envelopes and sealed in one enclosure.		
15	Undertaking in the technical proposals that the Bid Security has been submitted along-with the Commercial Proposal.		
16.	API 5L valid Certificate copy attached with the technical proposal.		

Note:
Non-availability of the above information/documents, or incomplete/incorrect statement on this checklist may result in rejection of the bid at / after the bid opening.

In all circumstances SSGC tender terms will prevail.

_____
Bidders Authorized Representative

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

Annexure F

Recommended Practice for Truck Transportation of Line Pipe

Sui Southern Gas Co. Ltd.
Procurement Dept.
H.O. Gulshan-e-Iqbal

Recommended Practice for Truck Transportation of Line Pipe

1 Scope

The recommendations provided herein apply to the transportation of coated or bare pipe in size 2 3/8 in. (60.3 mm) and larger, on trailer.

2 Purpose

This recommended practice was developed and exist, to minimize transportation damage, including transit fatigue for bare and coated line pipe of size 2 3/8 in. (60.3mm) and greater.

3 Definitions

3.1
bearing strips
The load bearing dunnage separating the pipe load from the trailer bed.

3.2
carrier
The party contracted to transport the pipe.

3.3
end user
The party using the pipe after it has been delivered and unloaded.

3.4
overhang
The distance from the rearmost bottom bearing strip on the trailer bed to the rear end of the bottom layer of pipe.

3.5
purchaser
The party contracting the shipper.

3.6
separator strip
The dunnage used for separating layers of pipe in the load where pipe layers are not nested.

3.7
shipper
The party contracting the carrier.

4 Additional information

The purchase order shall indicate which of the following provisions apply.

a) Items that apply if agreed between shipper, purchases, and party responsible for unloading the pipe:

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1) use of containerized or unitized loads (see section 7).

b) items that apply if agreed between the shipper and purchaser:

1) alternate maximum overhang (see section 10).

2) use of padded forks to handle bare pipe (see 11.7)

3) exclusion of ropes surrounding pipe (see 12.2.3).

c) items that apply if agreed between the shipper and end user:

1) use of metal chains or cables to tie-down loads (see 13.2 and 14.3).

d) items that apply as prescribed unless otherwise agreed by the purchaser:

1) longitudinal weld seam orientation to prevent pipe-to-weld contact and weld to steel banding strap contact (see 12.1.3).

5 Trailer Condition

5.1 Trailers used to ship be reasonably free of foreign material and debris, particularly those of such sizes and hardness that could damage pipe during shipment and handling or that could contribute to movement of the pipe during shipping.

5.2 Where steel uprights or stakes are used, they shall be adequately padded.

5.3 No metal projections on trailers such as bolts, nails or hooks that may come in contact with pipe during loading or transit are permitted.

5.4 When transporting coated pipe, the truck and trailer shall be equipped with mud guards to prevent stones and other debris from impacting the loads.

6 Types of Trailers

One of the following types of trailers shall be used:

- flat bed trailers (including stretch trailers),
- arch trailers (sometimes referred to as aluminum trailers),
- pole trailers (see 14.0)
- if agreed, step bed trailers.

7 Containerized Loads

7.1 By agreement between the shipper, purchase and the party responsible for unloading the pipe, containerized or unitized loads are permissible.

7.2 Upon consultation with purchaser and party unloading the pipe, the shipper shall determine the necessity of bottom bearing strip considering the unloading party's ability to unload the pipe.

7.3 The shipper shall determine the necessity of separator strip ensuring the unitized load is stable within the container and metal to metal contact is not possible except between adjacent pipe and as permitted by 7.2.

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8 Bearing Strips

8.1 Number

The minimum number of bearing strip positioned on the truck bed for pipe shall be per Table 1.

Table 1- Bearing strips minimum requirement by random length and overhang

Overhang	Minimum Number of Bearing Strip		
	40 ft (12m) Random Lengths	60 ft (18m) Random Lengths	80 ft (24m) Random Lengths
Greater than 3 times Nominal Diameter	4 bearing strips	6 bearing strips	8 bearing strips
Less than or equal to 3 times Nominal Diameter	3 bearing strips	5 bearing strips	7 bearing strips

8.2 Positioning

8.2.1 If an odd number of bearing strip are used, one bearing strip should be positioned in the approximate center of the load and other spaced appropriately.

8.2.2 Bearing strip shall be solidly attached where practical across the width of the trailer deck and shall be spaced to accommodate loading and unloading by forklift. The maximum spacing of bearing strip shall not exceed 10 ft (3m), excluding the gap in stretch trailers.

8.2.3 The front most bearing strip should be placed under the pipe near the front of the trailer.

8.3 Blocking and Shimming

8.3.1 Wooden blocking, where required because of uneven trailer sides, should be positioned between trailer sides and stakes, and firmly attached to stakes.

8.3.2 Blocking used for leveling shall be firmly attached strips.

8.3.3 Bottom bearing pieces may require shims to ensure that the load is in contact with all bottom pieces.

8.3.4 Side protection shall be provided for pipe shipped in trailers where the pipe may contact the sides of the trailer.

8.4 Dimensions

The thickness of the bearing strips shall be sufficient to prevent pipe from touching the bed or protrusions thereon and to allow sufficient spacing to accommodate handling with forklifts. Bearing strip thickness shall not exceed bearing strip width.

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8.5 Materials

8.5.1 Bearing strips shall be wood appropriate strength, dimensions and condition to properly support the load for which it is intended. Bearing strips with rounded corners, with splits or showing signs of rotting shall not be used.

8.5.2 Bearing strips shall be free of metallic protrusions (nails, staples, steel shavings, etc.) that could come in contact with the pipe.

9 Separator Strips

9.1 Location of Separator strips

Separator strips shall be located so as to be in approximate vertical alignment with the bottom bearing pieces. Efforts shall be made to move the shorter pieces on the load such that the location of the separator strips minimizes the instances of separator strips over an unsupported pipe section.

9.2 Materials

9.2.1 Separator strips shall be wood appropriate strength, dimensions and condition to properly support the load for which it is intended. Separator strips with rounded corners, with splits or with signs of rotting shall not be used.

9.2.2 Separator strips shall be free of metallic protrusions (nails, staples, steel shavings, etc) that could come in contact with the pipe.

10 Overhang

If agreed between the shipper and purchase, maximum allowable overhang limits may be defined.

11 Handling Equipment

11.1 Handling equipment (including end hooks, vacuum lifts, slings, and padded forklifts) that prevents the pipe or coating from having contact with brass, copper, bronze, or any other copper alloy shall be used.

11.2 If steel end hooks are used to handle the pipe, they shall be designed to prevent pipe end damage and shall be lined with a cushioning material such as rubber, plastic , composite, or aluminum in the area where the hood contacts the pipe end bevel and land face.

11.3 End hooks shall have sufficient width, depth, and configuration to fit the internal curvature of the pipe.

11.4 End hooks (excluding the bearing area) and adjacent cables shall have sufficient protection with a durable non-metallic padding to prevent damage to pipe ends or surfaces.

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11.5 Lifting shall be carried out in such a manner that impact loading sufficient to cause local denting or out-of-roundness of pipe body, pipe ends, adjacent pipe or other objects does not occur.

11.6 if slings are used for pipe handling, they shall be made of a non-metallic material, such as nylon banding and shall have sufficient strength to safely support the load. The slings shall also be placed in positions to maximize load stability and to prevent injury or damage to personnel, pipe and coatings.

11.7 When forklifts are used for handling coated pipe, fork tips and claps shall be properly padded to protect the pie being handled and adjacent pipe in the load or stack. If agreed between the shipper and purchaser, padded forks, clamps, etc. shall also be used to handle bare pipe.

12 Positioning and Loading of Pipe with Filler Metal

12.1 SAWL & COWL Pipe

12.1.1 Pipe with filler metal weld seams shall be positioned or padded in such a manner that the weld does not contact either the blocking or adjacent pipe.

12.1.2 When horizontal bearing strips are used, the weld seam shall be positioned at 45^0, $\pm 5^0$, from vertical.

12.1.3 When the pipe is nested, unless otherwise agreed to by the purchase, pipe with a straight filler metal weld seam shall be positioned in order to prevent pipe-to-weld seam contact, weld-to-bearing strip contact, weld-to-trail contact. Unless otherwise agreed to by the purchaser, weld seams shall be oriented to avoid contact with steel banding straps.

12.2 SAWH & COWH Pipe

12.2.1 As helical seam pipe (spiral weld) has a weld seam that winds around the pipe, special care shall be taken to prevent contact with the seam.

12.2.2 Except as permitted by 12.2.3 and unless provisions exist that prevent metal contact between the weld seams of adjacent pipes, bare and coated spiral weld pipe shall have at least four ropes of sufficient diameter and quality to prevent metal-to-metal contact and coating damage surrounding each joint of pipe prior to loading.
NOTE The type of coating should be considered in determining whether or not to use ropes. Ropes should not be used for polyethylene or polypropylene coating due to the likelihood of coating damage.

12.2.3 If agreed between the shipper and purchaser, ropes surrounding each pipe are not required (e.g. for transport over short distances, polyethylene or polypropylene coatings, etc).

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12.2.4 Where possible, spiral pipe on the bottom layer should be rotated while loading to prevent weld seams from contacting bottom bearing strips. Where this is not possible, sufficient padding shall be used on the bottom strips to protect the weld seam.

13 Banding and Tie-down

13.1 The quantity of nylon bands (or equivalent) to secure the cargo on the trailer shall be determined according to their safe working load along with the weight and length of the cargo to be secured.

13.2 If agreed between shipper and end user, metal chains or cables may be used for tie-downs. In this case, sufficient padding to prevent damage shall be used to separate the chains from direct contact with the pipe.

13.3 It is the responsibility of the carrier to choose the number and location of tie-downs to ensure pipes are adequately secured to the trailer in accordance with all governmental regulation ensuring load shifting and subsequent damage to the pipe load is minimized.

14 Pole Trailers

14.1 General

When pole trailers are used to transport pipe, the sections of this document addressing bearing and separator pieces (Section 7 through Section 10, and Section 13) do not apply.

14.2 Cradles

14.2.1 At least one wood cradle at each end of the pipe load shall replace bearing and separator strips.

14.2.2 Cradles shall be situated within metallic bunks attached to the trailer and contoured to the loaded pipe diameter.

14.2.3 When transporting coated pipe, the contact area of the cradles shall be covered with clean cushioning material such as carpet remnants or rubber.

14.2.4 The nominal cradle width of each cradle shall be at least 6 in (150 mm).

14.2.5 Consideration should be given to wider cradles or additional contours when transporting pipe with nominal lengths greater than 60 ft (18m).

14.3 Strapping

14.3.1 If agreed between shipper and end user, metal chains or cables may be used for tie-downs. In this case, sufficient padding to prevent damage shall be used to separate the chains from direct contact with the pipe load.

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14.3.2 It is the responsibility of the carrier to choose the number and location of tie-downs ensure pipes are adequately secured to the trailer in accordance with all governmental regulations ensuring load shifting and subsequent damage to the pipe load is minimized.

14.4 Overhang

14.4.1 General

The distance from the rear load bearing contour to the pipe end (overhang) shall be minimized giving due consideration to end swing from truck movement.

14.4.2 Protection during Transport

Pole trailers and tractors shall be equipped with fenders and mud flaps to sufficiently protect pipe and coating from impact damage from gravel and other debris flying up from the roadway.

15 Loading Diagrams

Loading diagrams which demonstrate compliance to this recommended practice shall be as per of API standards.

16 Inspection

16.1 Purchaser Access

The purchaser's representative (or inspector) shall have access to loading and unloading facilities with reasonable advance notice of loading and unloading activities.

16.2 Damaged Pipe

16.2.1 Unless authorized by the purchaser, damaged pipe shall not be transported. If damaged pipe is detected on board, it shall be noted on the bill of lading and the pipe marked by the carrier (or the inspector) to indicated pre-transit damage.

16.2.2 Pipe damage detected during transportation or unloading should be promptly reported (with photographs if possible) to the owner and the party responsible for the transportation, appropriately marked and set aside for further disposition.

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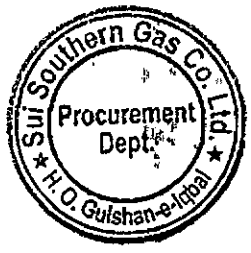
ANNEXURE-G

Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels

Upstream Segment

API RECOMMENDED PRACTICE 5LW
THIRD EDITION, SEPTEMBER 2009





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Shall: As used in a standard, "shall" denotes a minimum requirement in order to conform to the specification.

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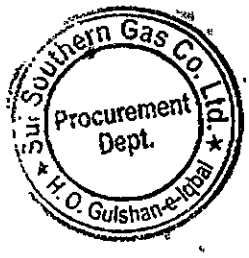
Suggested revisions are invited and should be submitted to the Standards Department, API, 1220 L Street, NW, Washington, DC 20005, standards@api.org.



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Introduction

This recommended practice (RP) shall become effective on the date printed on the cover but may be used voluntarily from the date of distribution. This RP is under the jurisdiction of the API Subcommittee on Standardization of Tubular Goods. Line pipe shipments on inland and marine waterways should be designed to assure that the pipe will arrive at the destination undamaged. The minimum mandatory rules in force for such shipments shall be followed. The rule of governing regulatory agencies shall be considered as basic, with the recommendations given herein as supplementary thereto. These supplementary recommendations are the result of line pipe shippers' experience that damage to the pipe during shipment can consist of three principal types as follows.

a) End Damage—End damage to pipe can occur during loading and unloading, or from a longitudinal load shift against a bulkhead or an adjacent pipe.

b) Abrasions or Peening—These result from a rubbing or pounding action against some protrusion such as the weld reinforcement of the adjacent pipe. This condition may result in initiation of fatigue cracks at the damaged areas during transit.

c) Longitudinal Fatigue Cracks—These are initiated in the pipe by vertical cyclical forces with no apparent local abrasion or denting. Fatigue cracks result from a combination of static and cyclic stresses produced by the weight of upper layers of pipe and/or other cargo giving a static load, and a cyclic load caused by the vertical movement.

The third edition of this RP incorporates revisions in light of an identification of inaccuracies in the equations for static load stress, which were derived by numerical methods decades ago. These inaccuracies were discovered when finite element analysis methods were used to check the equations. API is working to update and revise these equations for a future edition. Notwithstanding these inaccuracies, there have been no confirmed transit fatigue failures reported in pipe loaded in accordance with previous editions of this document.

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H.O. Gulshan-e-Iqbal

Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels

1 Scope

The recommendations in this document apply to transportation of API Specification 5L steel line pipe by ship or barge on both inland and marine waterways, unless the specific requirement of a paragraph in this document references only marine or only inland waterway transport. Inland waterways are defined as those waterways with various degrees of protection, such as rivers, canals, intracoastal waterways, and sheltered bays. These waterways can be fresh or saltwater but are usually traversed by barges. Marine waterways are defined as waterways over open seas with limited or no protection from wind, current, waves, and the like. These areas are normally traversed by sea-going vessels. These recommendations apply to steel line pipe that has 2 3/8-in. outside diameter (OD) and larger.

These recommendations cover coated or uncoated pipe, but they do not encompass loading practices designed to protect pipe coating from damage. These recommendations are not applicable to pipe-laying vessels or supply vessels. They must be considered as supplementary to the existing rules of governing agencies.

These recommendations are supplemental to shipping rules for the convenience of purchasers and manufacturers in the specification of loading and shipping practices and are not intended to inhibit purchasers and manufacturers from using other supplemental loading and shipping practices by mutual agreement.

2 Acronyms, Abbreviations and Symbols

D	specified outside diameter
GMAW	gas metal arc welding
OD	outside diameter
SAW	submerged arc welding
t	specified wall thickness

3 General Requirements

3.1 Vessel Condition

Cargo compartments should be reasonably free from any foreign objects or material likely to cause either physical damage, contamination, or chemical reaction with the pipe.

The bilge pumping system shall be in working order to remove standing water from the cargo hold.

3.2 Shipping Space

Pipe may be laid longitudinally or athwart the vessel to make the best use of available space. A clearance of 1 ft must be left between the ends of the pipe and the vessel (or other cargo) to facilitate unloading. Dimensions of hatchways should be large enough to allow the pipe to pass in a horizontal position unless special precautions are taken.

3.3 Handling Equipment

When end hooks are used for handling pipe, they shall be designed to prevent end damage and should be lined in the area of land (bevel face) contact with a cushioning material (e.g. a nonmetallic material such as rubber or a metallic material such as aluminium, but brass or copper shall be excluded). These hooks shall also have sufficient width and depth to fit the internal curvature of the pipe. Rubber aprons should be attached to pipe hooks to protect the pipe ends unless adequate end protectors are used. Lifting shall be carried out in such a manner that impact loads sufficient to

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cause local denting or out-of-roundness of pipe body or pipe ends will not occur. When the pipe is loaded by loose lifts, all necessary precautions shall be taken during loading and unloading to prevent surface or other damage to the pipe.

3.4 Stacking Arrangement

3.4.1 Stowage

When stacking, one should consider the maximum weight that the bottom layer of pipe can withstand before deformation will occur. Short lengths should be placed on the top of the stack.

Pipe in the hold of a vessel during marine shipments shall be cantline stowed.

Cantline stowage shall be defined as stowage without separator strips (e.g. nesting or pyramid fashion) but including wood blocking every other tier on both sides of the hull as illustrated in Figure 1. If the top tier is a partial load, separator strips shall be used to secure additional blocking, which is used to secure the top tier of pipe.

For inland waterway transit, pipe may be cantline stowed, or separator strips may be used between successive tiers of pipe.

Loaded pipe shall not contact the sides or bottom of the vessel. However each length of pipe shall be in contact throughout its entire length with all adjacent pipe or blocking, and precautions should be taken to minimize any lateral movement.

Pipe with filler metal weld seams (SAW and GMAW) shall be positioned or padded in such a manner that the weld does not contact the blocking or adjacent pipe. When horizontal stripping (permissible only for transportation on inland waterways) is used to load pipe with longitudinal seam welds made with filler metal (SAW and GMAW), the weld seam shall be positioned at 45° ± 5° from vertical. When nested pipe with longitudinal seam welds made with filler metal (SAW and GMAW) shall be positioned with the seam at 0° (in other words, 12 o'clock).

3.4.2 Loading on Deck

The pipe shall be placed on a horizontal surface, and the building of a wooden floor is recommended to eliminate contact of the pipe with metallic protrusions and to compensate for inclined planes. There shall be a sufficient number of stanchions for the pipe to rest against. If the stanchions are metallic, wood or rubber strips shall be interposed between them and the pipe. Stowing cables or chains shall be isolated from any contact with pipe through a protection medium such as rubber strips. During transportation, the tension of stowing cables or chains should be checked daily.

3.5 Bearing and Separator Strips

Wood-bearing and separator strips shall be a minimum size of 4 in. × 2 in. Metallic-bearing strips are prohibited. Bearing strips shall be used to keep the bottom layer of pipe above the hold bottom. The spacing of these strips should be as small as necessary but no greater than 4 ft and at least four bearing strips per pipe stack must be used unless otherwise agreed as allowed in Section 4. For inland waterway shipments, horizontal separator strips may be used when the pipe is not nested. These horizontal strips should be located directly above the bottom bearing strips.

Additional blocking, if necessary, shall be used to minimize lateral movement of pipe.

3.6 Side Protection

To prevent stress concentrations, wooden side-bearing strips or wood blocking shall be provided to prevent contact with the hull of the vessel or any protrusion.

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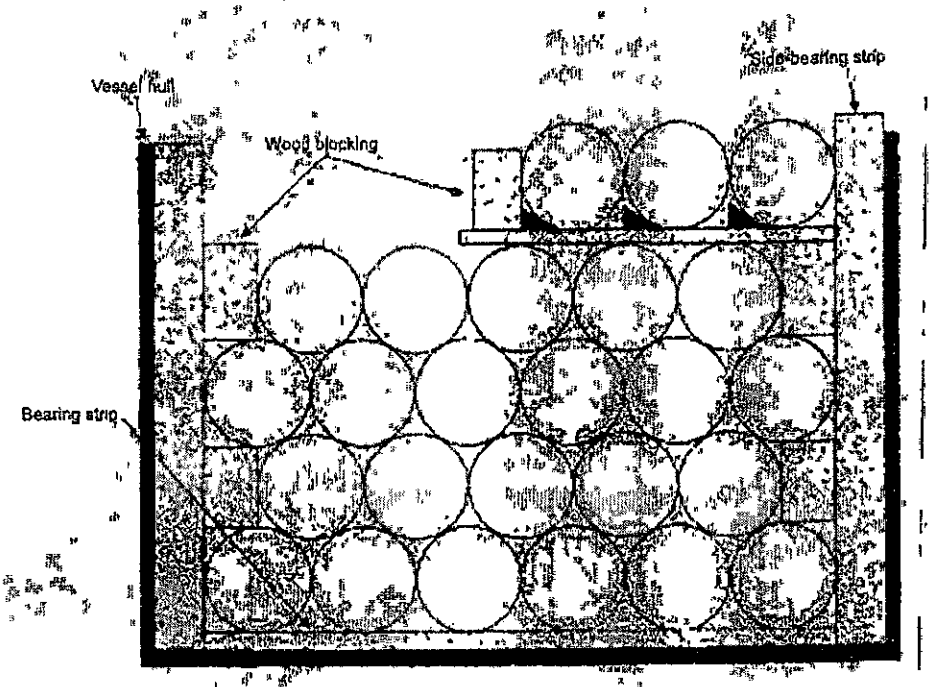

Figure 1—Cantline Stowage

3.7 Inspection

3.7.1 General

Purchaser's inspector shall have access to loading and unloading facilities, with reasonable advance notice of loading and unloading.

3.7.2 Loading

Damaged pipe shall not be loaded on board. If damaged pipe is detected on board it should be noted on the bill of lading and the pipe marked by the carrier to indicate pretransit damage.

3.7.3 Unloading

Pipe damage detected during transit or unloading should be promptly reported to the carrier and/or manufacturer and appropriately marked and set aside for further inspection.

4 Transit Fatigue

Transit fatigue has been reported in pipe with diameter-to-thickness ratios as low as 125 and in line pipe grades from Grades B through X70 [1]. Cracks have been found at three general locations: along the edge of submerged-arc welds; in the pipe base metal at areas of denting, metal-to-metal contact or abrasion; and at the pipe ends.

The variables that influence transit fatigue include the magnitude of the static stress, the number and magnitude of the cyclic stresses, the size of the contact area, the nature of the bearing surface, the degree of surface damage, and the ambient environment. Contact with hard surfaces, such as nail heads, bolts or other debris, steel stanchions, wire

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cables, and so forth, can lead to transit fatigue even when stresses are properly controlled. Corrosive atmospheres such as might be encountered in humid coastal or industrial areas can accelerate fatigue damage.

Transit fatigue generally causes multiple cracks emanating from the area of surface contact. A distinctive feature of transit fatigue is that cracks will usually be found at both the inside and outside surfaces.

In order to minimize the possibility of fatigue damage on pipe having a *D/t* ratio of 50 or more, consideration shall be given to both the static and dynamic forces that act upon the pipe during transportation. The dynamic stress induced in the pipe is dependent on the height of the waves, the speed of the vessel, the length of the vessel, the response of the vessel to the water surface, and the location of the pipe along the axis of the vessel.

Pipe shall be loaded in accordance with loading procedures that minimize risk of transit fatigue. The procedures may be based on the items below.

a) Analyses of the static and dynamic stresses, number of stress cycles, and other variables that influence fatigue

b) Practices that can be documented as being effective in preventing transit fatigue. Documentation shall include shipping records for pipe of the same diameter and similar grade and wall thickness as covered by the procedure.

c) Other practices that are mutually agreed between the purchaser and supplier.

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Bibliography

[1] T.V. Bruno, "How To Prevent Transit Fatigue To Tubular Goods," *Pipe Line Industry*, July 1988, pp 31 to 34

Sui Southern Gas Co. Ltd.
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Tender Enquiry No. SSGC/...../...../...../

ANNEXURE- I

Declaration of Ultimate Beneficial Owners Information for Public Procurement Contracts.

1. Name
2. Father's Name/Spouse's Name
3. CNIC / NICOP/Passport No.
4. Nationality
5. Residential address
6. Email address
7. Date on which shareholding, control or interest acquired in the business.
8. In case of indirect shareholding, control or interest being exercised through intermediary companies, entities or other legal persons or legal arrangements in the chain of ownership or control, following additional particulars to be provided:

1	2	3	4	5	6	7	8	9	10
Name	Legal form (Company/Limited Liability Partnership /Association of Persons/Single Member Company/Partnership Firm/Trust/Any other Individual, Body Corporate (to be Specified)	Date of Incorporation / Registration	Name of Regulatory Authority	Business Address	Country	Email Address	Percentage of shareholding, control or Interest of BO in the Legal Person or Legal Arrangement	Percentage of shareholding, Control or Interest of Legal Person or Legal Arrangement in the Company	Identity of Natural Person who Ultimately owns or Controls the Legal Person or Arrangement

9. Information about the Board of Directors (details shall be provided regarding number of shares in the capital of the company as set opposite respective names).

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1	2	3	4	5	6	7	8
Name and surname (in block Letters)	CNIC no (in case of foreigner Passport No)	Father's / Husband's Name in Full	Current Nationality	Any other Nationality (ies)	Organization	Residentially address in full of the registered / principle office address for a subscribers other that natural person	Numbers of shares taken by cash subscribers (in figures and words
			Total numbers of shares taken (in figures and words)				

10. Any other information incidental to or relevent to beneficial owners).

Name and signature
(Person authorized to issue notice on behalf of the company)

Sui Southern Gas Co. Ltd. Procurement Dept. H.O Gulshan-e-Iqbal

ANNEXURE - II

WARRANTY UNDERTAKING

M/s. Sui Southern Gas Co. Ltd.
SSGC House, Sir Shah Sulaman Road,
Gulshan-E-Iqbal, Karachi.

From _____ (FIRM NAME)

Tender Enquiry No. _____ Date _____

1. In case we stands as the lowest bidder and the order is placed on us against the cited tender enquiry, we hereby guarantee that the goods supplied against above tender enquiry are in all respect in accordance with the tender specifications and that material used are in accordance with the latest approved standards and are of good workmanship / quality. Any item or part of item if found to be substandard or not meeting the specified criteria as per pre-shipment / post shipment inspection report, than in such as event the Supplier hereby warrants and undertake to replace the same on DDP basis (INCOTERMS 2010) i.e. free of all cost including but not limited to transportation, taxes and levies.

2. In case of our failure to replace the defective item /remove the defect(s) free of cost within the period specified by the Purchaser, we will refund the relevant cost including all other expenses incurred by the purchaser in this regard.

3. This warranty will remain valid for 18 months after the goods have been successfully delivered or commissioned.

Signature _____

Company Stamp _____

Sui Southern Gas Co. Ltd. * H.O. Gulshan-e-Iqbal * Procurement Dept.

Supplier code: _____

FORM-X

Bank account details form for all Beneficiaries

(Mandatory requirement for Digital Online Banking)

As per FBR Regulations ref # C.No.4 (24) IT-Budget/2021-142150-R dated 23rd Sept'2021 to make the payment online w.e.f. 01-11-2021. All beneficiaries are required to fill in the below details, which is mandatory:

Name of Firm: _____

Address of Firm: _____

_____

CNIC #: _____

NTN #: _____

Bank Name: _____

Bank A/C Title name: _____

Branch code: _____

Bank A/c #: _____ (16 Digits)

Bank IBAN #: _____ (24 Digits)

☐ Information already submitted.

Note: Please be attached copy of Cheque / Account Maintenance Certificate.(Mandatory)

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

_____

Authorized Sign & Stamp

Date:_____

Note: All payments transactions will be made on above mentioned Account details. This is only a one time information to be provided by the all beneficiaries. Incase if the above detail has already submitted, please tick the box above "Information already submitted" and also ensure Form-X is duly signed & stamped.

Sui Southern Gas Company Limited
SSGC

FORM "Y"

(SSGC – sample submission form)

SECTION A: BIDDER INFORMATION	
FIELD	**DETAILS**
Bidder Name / Firm Name	
NTN / GST No.	
Address	
Contact Person	
Contact Number	
Email Address	
Declaration by Bidder	
I/We hereby declare that the sample(s) submitted are in accordance with the tender specifications and terms. I/We understand that failure to submit correct and complete samples may lead to disqualification.	
Signature of Bidder:	

SECTION B: TENDER DETAILS	
FIELD	**DETAILS**
Tender No.	
Tender Opening Date	
Item(s) for which sample is submitted	
Quantity of Sample Submitted	
Specification/Description of Sample	
Make:	
Brand:	
Serial No:	
Generics: size, height, weight, width:	
Other description:	

SECTION C: FOR OFFICE USE ONLY (TO BE FILLED BY TENDER ROOM)	
FIELD	**DETAILS**
Date & Time of Submission	
Received By (Tender Room Staff Name & Sign)	
Tender Room Stamp	
Remarks (if any)	

Sui Southern Gas Co. Ltd. Procurement Dept. H.O Gulshan-e-Iqbal

Form of Bid-Securing Declaration

[The Bidder shall fill in this Form in accordance with the instructions indicated.]

Date: *[date (as day, month and year)]*
No.: *[number of Bidding process]*
Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[complete name of Procuring Agency]*

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid-Securing Declaration.

We accept that we will be blacklisted and henceforth cross debarred for participating in respective category of public procurement proceedings for a period of (not more than) six months, if fail to abide with a bid securing declaration, however without indulging in corrupt and fraudulent practices, if we are in breach of our obligation(s) under the Bid conditions, because we:

(a) have withdrawn our Bid during the period of Bid validity specified in the Letter of Bid; or

(b) having been notified of the acceptance of our Bid by the Procuring Agency during the period of Bid validity, (i) fail or refuse to sign the Contract; or (ii) fail or refuse to furnish the Performance Security (or guarantee), if required, in accordance with the ITB.

We understand this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of our Bid.

Name of the Bidder: _____

Name of the person duly authorized to sign the Bid on behalf of the Bidder**: _____

Title of the person signing the Bid: _____

Signature of the person named above: _____

Date signed _____ day of _____

*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

**: Person signing the Bid shall have the power of attorney given by the Bidder attached to the Bid

[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all members to the Joint Venture that submits the Bid.]

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SSGC PLANNING & DEVELOPMENT DEPARTMENT	SUI SOUTHERN GAS COMPANY LIMITED MANDATORY REQUIREMENTS FOR 3LPE PRE-COATED PIPE TENDER ENQUIRY NO. _____	MANDATORY

MANDATORY REQUIREMENTS:

1) The yardstick for assessing manufacturer's production capabilities for 24" pipe for award of scope shall be 10,000 meters/month.
2) Pipe manufacturer must have five (05) years manufacturing experience required for participating in subject tender document.
3) 3LPE coating applicator must have five (05) years coating application experience.
4) The bidder shall submit supporting documents of sales Track record for offered Line pipes including copies of purchase order & satisfactory performance certificate of operations issued by different clients/ end users related to Oil & Gas sector with similar requirement along with their contact info (name, email ID, phone no., and addresses) within the last five (05) years and have been successfully installed and operated.
5) The bidder may sub-contract the services of 3LPE coating application through any coating firm/ company based on full responsibility by bidder as per tender terms.
6) Manufacturer / supplier (sub-contractor if applicable) must have valid copy of following Certificates:
   - API 5L Certificate for manufacturing of steel line pipe.
   - ISO 9001: 2015/API Specs Q1/ API QR/ API QMS covering scope for application of 3LPE external coating on steel pipe and for Quality Control and Management System
   - ISO 14001: 2015 (or Latest) for an effective environmental management system.
   - ISO 45001: 2018 (or Latest)/ 18001 for Occupational Health & Safety system.
7) Manufacturer shall develop Quality and Inspection Testing plan as per SSGC specification and will get it approved from SSGC before commencement of manufacturing process
8) Manufacturer shall follow all tests & standards mentioned in technical specifications:
   - **LPI-SPE-GE-0001 (Line Pipe Specification)**
   - **COT-SPE-GE-0100 (3LPE Specification)**

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

SSGC

Supply of 120 MMCFD RLNG at Designated Point (Door-Step) of Karachi Industrial Park (KIP), Sindh

SCHEDULE OF REQUIREMENTS,
DELIVERY SCHEDULE, DUMP LOCATIONS
AND
TECHNICAL SPECIFICATIONS

FOR

3LPE PRE-COATED LINE PIPE

Sui Southern Gas Co. Ltd. ★ H.O. Gulshan-e-Iqbal ★ Procurement Dept.

SUI SOUTHERN GAS COMPANY SSGC

SSGC PLANNING & DEVELOPMENT DEPARTMENT	SUI SOUTHERN GAS COMPANY LIMITED SCHEDULE OF REQUIREMENTS FOR 3LPE PRE-COATED PIPE TENDER ENQUIRY NO. _____	ANNEXURE-I

Supply of 120 MMCFD RLNG at Designated Point (Door-Step) of Karachi Industrial Park (KIP), Sindh

This Schedule of Requirement for the 3LPE Pre-Coated line pipes in various sizes as specified herein, and shall conform to the specifications attached as Annexure –I, II, III, Appendices A & B of this tender enquiry and also specified herein this Schedule of Requirements:
Bidders may submit technical proposal for the complete on item basis with Line pipe and Coating facility. For any case, Bidder must comply with all Mandatory requirements.

LINE PIPE:

S. No.	Description	Qty. (Meters)	Index No.
1	Pipe - API 5L Grade 'X70' (3LPE Pre-Coated) PSL 2		
1.1	24" Dia. x 0.375" Wall Thickness, API 5L PSL-2 X70 ERW/SAWH/LSAW	6,000	See at your end

Sui Southern Gas Co. Ltd. H.O. Gulshan-e-Iqbal Procurement Dept.

SUI SOUTHERN GAS COMPANY SSGC

SSGC PLANNING & DEVELOPMENT DEPARTMENT	SUI SOUTHERN GAS COMPANY LIMITED DELIVERY SCHEDULE & DUMP LOCATION FOR 3LPE PRE-COATED LINEPIPE TENDER ENQUIRY NO. _____	ANNEXURE-II

Supply of 120 MMCFD RLNG at Designated Point (Door-Step) of Karachi Industrial Park (KIP), Sindh

DELIVERY SCHEDULE:

The above quantities of 3LPE Pre-Coated Line pipe are to be shipped in accordance with the following delivery schedule:

For FOR contracts; Delivery to start from 121 days after the date of opening of operative letter of credit/placement of purchase order and 6,000 meters quantity of line pipe to be delivered by manufacturer and completed within 150 days.

For FOB contracts; Delivery within 120 days from the date of opening of letter of credit.

For C&F contracts; Delivery within 150 days from the date of opening of letter of credit.

DUMP LOCATIONS:

Delivery of Line pipe will be at following pipe dump locations quantity wise.

LOT #	Description	Qty. (Meters)	SSGC's Pipe Dump Locations
1	**Pipe - API 5L Grade 'X70' (3LPE Pre-Coated) PSL 2**		
1.1	24" Dia. x 0.375" Wall Thickness, API 5L X70 PSL-2 ERW/SAWH/LSAW	6,000*	SSGC SMS Pakland

*The quantity may vary by +/- 1% at the time of placement of purchase order

Note:
The above Pipe Dump Locations (PDL) are tentative. The joint site visit of dump locations will be arranged along with bidders by SSGC, if required prior to submission of the bid.

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SSGC PLANNING & DEVELOPMENT DEPARTMENT	SUI SOUTHERN GAS COMPANY LIMITED SCHEDULE OF REQUIREMENTS DESCRIPTION FOR 3LPE PRE-COATED PIPE TENDER ENQUIRY NO. _____	ANNEXURE-III

The requirements outlined below, as well as those specified in the technical specification, shall govern the execution of this purpose order. The below requirements shall be fulfilled by the bidder with their product evaluated values which shall compliant with standards.

S. No	Description	Line Pipe Spec No. LPI-SPE-GE-0001
01	Material	API 5L X70
02	PSL Type	PSL 2
03	Type of Pipe	Welded
04	Type Of Welding	ERW/ SAWH/ LSAW
05	Size	24" OD
06	Schedule/WT	0.375"
07	Pipe Ends	Bevel Ends
08	Mill Test Pressure	To be filled by the Bidder=_____
09	Hydrostatic Pressure Test in the field	To be filled by the Bidder=_____
10	Elongation Value	To be filled by the Bidder=_____
11	Pipe Burst Test	Burst Test to be Performed on **01 Line pipe** and its cost shall be included in the whole bid Cost. This limit is exclusive of re-tests necessary due to failure of any specimen.
12	Pipe DWT Test	----------
13	Inspection Checklist	Bidder shall fulfill as per Appendix- A

S. No	Description	3 Layer Polyethylene Coating Spec No. LPI-SPE-GE-0100
14	Indentation Value	To be filled by the Bidder=_____
15	Coating Resistance	To be filled by the Bidder=_____
16	Cathodic Disbonding	To be filled by the Bidder=_____
17	Peeling Resistance	To be filled by the Bidder=_____
18	Elongation	To be filled by the Bidder=_____
19	Inspection Checklist	Bidder shall fulfill as per Appendix- B

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SUI SOUTHERN GAS COMPANY LIMITED (SSGC)

TECHNICAL SPECIFICATION FOR
LINE PIPE

RECEIVED
07 DEC 2023
ASGM (T) Office-KT

RECEIVED
18 DEC 2023
GM I/C OFFICE
HSE & QA

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Procurement Dept.
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1 GENERAL

1.1 Scope

The purpose of this specification is to describe the minimum functional and technical requirements for Bare Line Pipes suitable for natural gas transportation.

1.1.1 Line pipe shall meet the requirements of API specification 5L, except where this technical specification sets out more stringent or additional requirements.

1.2 Definitions

PURCHASER means OWNER and MANUFACTURER means CONTRACTOR/SUPPLIER/ BIDDER. This definition shall apply throughout this specification.

1.3 Errors or Omissions

1.3.1 The review and comment by the Owner on any manufacturer's or its manufacturer's drawings, procedures or documents shall only indicate acceptance of general requirements and shall not relieve the Manufacturer of its obligations to comply with the requirements of this specification and other related parts of the contract documents.

1.3.2 Any errors or omissions noted by the manufacturer in this Specification shall be immediately brought to the attention of the Owner.

1.4 Deviations

All deviations to this Specification, other specifications or attachments shall be brought to the knowledge of the owner in the bid. All deviations made during the procurement, design, manufacturing, testing and inspection shall be with written approval of the owner prior to execution of the work. Such deviations shall be shown in the documentation prepared by the manufacturer.

1.5 Conflicting Requirements

1.5.1 In the event of conflict, inconsistency or ambiguity between the contract scopes of work, this Specification, National Codes & Standards referenced in this Specification or any other documents, the manufacturer shall refer to the Purchaser whose decision shall prevail.

1.5.2 Some requirements in this specification may be modified by specific requirements in the Purchase Specification. In case of conflict, the specific requirements supersede this specification.

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1.6 Reporting Procedure

1.6.1 A reporting and documentation system shall be agreed between the Purchaser and the manufacturer for the status of procurement, manufacturing, inspection, testing and shipment of the equipment/material to be supplied under this specification.

1.6.2 Manufacturer shall provide all reports and summaries for production performance and testing operations in conformance with a manufacturing schedule approved by Purchaser.

1.6.3 Daily, weekly and monthly run summaries of all major aspects of the production process shall be provided as reports to the Purchaser.

1.6.4 All such reports shall include the following:

- Record of production material
- Material type, name and composition
- Pipe produced/pipe accepted.
- Average length.
- Coil number/heat number list.
- Record of pipe dispatched.
- Total quantity produced.
- Laboratory test results

1.6.5 Further, all production and testing records shall be made available for inspection by the Owner at any time upon request.

2 ABBREVIATIONS/SYMBOLS

For the purpose of this document, the words and expressions listed below shall have the meanings assigned to them as follows:

ABBREVIATION	NAME
ANSI	American National Standard Institute
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society of Testing and Materials

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ABBREVIATION	NAME
AWS	American Welding Society
°C	Celsius (Degree)
DIN	Deutsches Institute für Normung", meaning "German institute for standardisation".
DWT	Drop Weight Tear Test
EN	European Standard
ERW	Electric Resistance Welded
°F	Fahrenheit (Degree)
Gr.	Grade
HFW	High Frequency Welded
ISO	International Organization for Standardization
Max	Maximum
Mn	Manganese
Mo	Molybdenum
MTC	Material Test Certificate
OD	Outside Diameter
PE Coating	Polyethylene Coating
PQT	Procedure Qualification Test
PSL	Product Specification Level
QA/QC	Quality Assurance/Quality Control
RT	Radiographic Testing

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ABBREVIATION	NAME
SAW	Submerged Arc Welding
SAWH	Submerged Arc Welding Helical
SAWL	Submerged Arc Welding Longitudinal
SMLS	Seamless
SMYS	Specified Minimum Yield Strength
SOR	Schedule of Requirement
STD.	Standard
UV	Ultra Violet
UT	Ultrasonic Testing

3 CODES, REGULATIONS AND STANDARDS

3.1 All line pipe supplied shall meet the requirements of API Specification 5L as amended or supplemented by this Specification, codes, Standards and Specifications of this Clause and any additional requirements as may be stated on the accompanying purchase order.

- ANSI B31.8: Gas Transportation Piping System
- API SPEC. 5L: Specification for Line Pipe (forty-sixth edition, 2018)
- API STD 1104: Standard for Welding Pipelines & Related Facilities
- ISO 9000/9001/9002: Quality Systems
- API RP 5L5: Recommended Practice for Marine transportation of line pipe
- API RP 5LW: Recommended Practice for Transportation of Line Pipe on Barges & Marine Vessels
- ASTM A370: Mechanical Testing of Steel Products
- ASNT-SNT-TC-IA: Personnel qualification and certification in non-destructive testing.
- ASTM A751: Standard Test Methods for Chemical Analysis of Steel Products
- API 5L 1: Recommended practice for Rail Road Transportation of Line Pipe.

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- API 5LT: Recommended practice for truck transportation of Line Pipe.
- ASME SEC V: Non Destructive Examination

4 GENERAL REQUIREMENTS

4.1 All inspection and certification may be undertaken by a third party certification body approved by the Owner. In addition, the Owner may appoint its representative or a third party Inspector for certification, inspections and tests which will be carried out by manufacturer during the production of line pipe. Owner shall also require 3rd party Inspection Certification for the steel which will be used for the manufacturing of pipe.

4.2 Satisfactory test results of the material, conducted prior to the manufacturing, shall govern the manufacturing of the pipes. In case of 3 continuous unsatisfactory test results or non-compliance of the agreed production process, purchaser may ask the manufacturer to stop the production and proceed with additional heat analysis, ultrasonic tests and inspections. The production may continue after the satisfactory results.

4.3 The Supplier shall submit six copies of Inspection and MTC to the Purchaser after placement of order and before manufacturing process. The Purchaser has right to reject the consignment if bidder has failed to provide MTC.

4.4 Pipe Supplier/Manufacturer shall provide details for the source of steel (raw material) manufacturer along with their MTC and quality certificates such as ISO 9001, etc.

4.5 Manufacturer shall submit Manufacturer Procedure Specification (MPS) and Inspection Testing Plan (ITP) sample document along with BID. Further, approved MPS & ITP will submit prior to start of production of pipe for SSGC's review and approval.

4.6 The pipe supplied by the manufacturer shall be non-expanded type.

5 PROCESS OF PIPE MANUFACTURING

5.1 Process of Manufacture

The process of Pipe manufacturing shall be either seamless, submerged arc welded (SAW) or electric resistance welded (ERW) or high frequency electric induction welded (HFEIW) as mentioned in the schedule of requirement.

5.1.1 Manufacturing Procedure Specification (MPS)

The manufacturer shall submit a written manufacturing procedure to the Owner at least two (02) weeks prior to the commencement of production. Production shall not

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commence before the Owner has reviewed and noted the Manufacturing procedure. The manufacturing procedure shall include the following information:

5.1.1.1 Manufacturer shall also provide details of manufacturing type of pipe (either it is ERW, SAWL and SAWH).

5.1.1.2 Details of steel making process including source of steel, proposed steel composition, and steel making quality control.

5.1.1.3 Details of plate, coil or strip preparation including edge trim and shape.

5.1.1.4 Location and details of welding equipment including post weld heat treatment;

5.1.1.5 Details of welding procedure, including WPS and PQR, and qualification tests.

5.1.1.6 The number, type and location of non-destructive testing units. Detailed information shall be provided by manufacturer to explain the structure and performance of the equipment to be used to inspect the weld seam fully after hydrostatic test. Information shall include calibration methods, reference Standards, calibration frequency and speed. Attention shall be given to standards that apply to manual ultrasonic inspection for production or automatic indication evaluation.

5.1.1.7 Details of hydrostatic test including calibration of test gauges and recorders.

5.1.1.8 Bidder/Manufacturer shall confirm daily production mill capacity (tonnage).

5.1.1.9 A flow schematic of the mill production and inspection systems, along with a description of pipe tracking and identification, shall be provided. Details of the methods used to ensure that correctly matching pipe documentation is available at the final inspection bench prior to pipe inspection should also be included.

5.1.1.10 Details of handling and loading both within the manufacturing area and for shipment to delivery location.

5.1.1.11 Any change in the approved MPS whether a change in steel chemistry, steel making, steel rolling and coiling, pipe forming, welding, testing or inspection shall be reported immediately to the Purchaser. The need for change and re-qualification of the MPS shall be reviewed and subject to approval by the Purchaser.

5.1.2 Manufacturing Procedure Qualification (MPQ)

A pipe shall be selected by the Owner's Representative/Third Party from the first lot of pipe for each grade, diameter and wall thickness of pipe produced to perform the Manufacturing Procedure Qualification (MPQ) tests. The selected pipe shall be evaluated by all tests and inspections required by this specification and with the additional tests defined below:

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5.1.2.1 Visual inspection and checking of dimensions.

5.1.2.2 PSL 1 Required Test

Table 1 - Inspection Frequency for PSL 1 Pipe

No	Type of Inspection	Type of Pipe	Frequency of Inspection [c]
1	Heat analysis	All pipe	One analysis per heat of steel
2	Product analysis	SMLS, CW, LFW, HFW, LW, SAW, or COW	Two analyses per heat of steel (taken from separate product items)
3	Tensile testing of the pipe body of welded pipe with $D \leq 48.3$ mm (1.900 in.), in Grade L175 or A25	CW, LFW, or HFW	Once per test unit [e] of not more than 25 tonnes (28 tons) of pipe
4	Tensile testing of the pipe body of welded pipe with $D \leq 48.3$ mm (1.900 in.), in Grade L175P or A25P	CW	Once per test unit [e] of not more than 25 tonnes (28 tons) of pipe
5	Tensile testing of the pipe body of welded pipe with $D > 48.3$ mm (1.900 in.), in Grade L175 or A25	CW, LFW, or HFW	Once per test unit of not more than 50 tonnes (55 tons) of pipe
6	Tensile testing of the pipe body of welded pipe with $D > 48.3$ mm (1.900 in.), in Grade L175P or A25P	CW	Once per test unit of not more than 50 tonnes (55 tons) of pipe
7	Tensile testing of the pipe body of seamless pipe	SMLS	Once per test unit of pipe with the same cold-expansion ratio [a]
8	Tensile testing of the pipe body of welded pipe in grades higher than Grade L175 or A25	LFW, HFW, LW, SAW, or COW	Once per test unit of pipe with the same cold-expansion ratio [a]
9	Tensile testing of the longitudinal or helical seam weld of welded pipe with $D \geq 219.1$ mm (8.625 in.)	LFW, HFW, LW, SAW, or COW	Once per test unit of pipe with the same cold-expansion ratio [a,b,c]
10	Tensile testing of the coil/plate end weld of welded pipe with $D \geq 219.1$ mm (8.625 in.)	SAWH or COWH	At least once per 50 coil/plate end welds from pipe with the same cold-expansion ratio [a,c,d]
11	Bend testing of the longitudinal seam weld of welded pipe with $D \leq 48.3$ mm (1.900 in.), in Grade L175, L175P, A25, or A25P	CW, LFW, or HFW	Once per test unit of not more than 25 tonnes (28 tons) of pipe
12	Bend testing of the longitudinal seam weld of welded pipe with 48.3 mm (1.900 in.) $< D \leq 60.3$ mm (2.375 in.), in Grade L175, L175P, A25, or A25P	CW, LFW, or HFW	Once per test unit of not more than 50 tonnes (55 tons) of pipe
13	Guided-bend testing of the longitudinal or helical seam weld of welded pipe	SAW or COW	Once per test unit of not more than 50 lengths of pipe of the same grade
14	Guided-bend testing of the coil/plate end weld of welded pipe	SAWH or COWH	At least once per 50 coil/plate end welds from pipe with the same cold expansion ratio [a,c,d]
15	Guided-bend testing of the longitudinal seam weld of welded pipe with $D \geq 323.9$ mm (12.750 in.)	LW	Once per test unit of not more than 50 lengths of pipe of the same grade

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No	Type of Inspection	Type of Pipe	Frequency of Inspection [c]
16	Flattening test of welded pipe	CW, LFW, HFW OR LW	As shown in Figure 6.
17	Hardness testing of hard spots in cold-formed welded pipe	LFW, HFW, LW, SAW, or COW	Any hard spot exceeding 50 mm (2.0 in.) in any direction
18	Hydrostatic testing	SMLS, CW, LFW, HFW, LW, SAW, or COW	Each pipe
19	Macrographic testing of the longitudinal or helical seam weld of welded pipe	SAW or COW	At least once per operating shift plus whenever any change of pipe size occurs during the operating shift; or, if 10.2.5.2 applies, at the beginning of the production of each combination of specified outside diameter and specified wall thickness
20	Metallographic testing of the longitudinal seam weld of welded pipe	LFW or HFW excluding full-body normalized pipe	At least once per operating shift plus whenever changes of grade, specified outside diameter or specified wall thickness are made; plus whenever excursions from operating heat treatment conditions are encountered
21	Visual inspection	SMLS, CW, LFW, HFW, LW, SAW, or COW	Each pipe, except as allowed by 10.2.7.2
22	Pipe diameter and out-of-roundness	SMLS, CW, LFW, HFW, LW, SAW, or COW	At least once per 4 h per operating shift plus whenever any change of pipe size occurs during the operating shift
23	Wall thickness measurement	All pipe	Each pipe (see 10.2.8.5)
24	Other dimensional testing	SMLS, CW, LFW, HFW, LW, SAW, or COW	Random testing, with the details left to the discretion of the manufacturer
25	Weighing of pipe with $D <$ 141.3 mm (5.563 in.)	SMLS, CW, LFW, HFW, LW, SAW, or COW	Each pipe or each convenient group of pipe, with the choice being at the discretion of the manufacturer
26	Weighing of pipe with $D \geq$ 141.3 mm (5.563 in.)	SMLS, CW, LFW, HFW, LW, SAW, or COW	Each pipe
27	Length	SMLS, CW, LFW, HFW, LW, SAW, or COW	Each length of pipe shall be measured, except that pipe made in lengths that are uniform within 30 mm (0.1 ft) need not be individually measured, provided the accuracy of the length is verified at least once per 4 h per operating shift
28	Nondestructive inspection	SMLS, CW, LFW, HFW, LW, SAW, or COW	In accordance with Annex E

[a] The cold-expansion ratio (if applicable) is designated by the manufacturer and is derived using the designated before-expansion outside diameter or circumference and the after-expansion outside diameter or circumference; an increase or decrease in the cold-expansion ratio of more than 0.002 requires the creation of a new test unit.

[b] For double-seam pipe, both longitudinal weld seams in the pipe selected to represent the test unit shall be tested.

[c] Pipe produced by each welding machine shall be tested at least once per week.

[d] Applies only to finished helical seam pipe containing coil/plate end welds.

[e] "Test unit" is as defined in 9.1.60.

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5.1.2.3 PSL 2 Required Test

Table 2 - Inspection Frequency for PSL 2 Pipe

No	Type of Inspection	Type of Pipe	Frequency of Inspection [c]
1	Heat analysis	All pipe	One analysis per heat of steel
2	Product analysis	SMLS, HFW, SAW, or COW	Two analyses per heat of steel (taken from separate product items)
3	Tensile testing of the pipe body $D \leq 141.3$ mm (5.563 in.)	SMLS, HFW, SAW, or COW	Once per test unit of not more than 400 pipes with the same cold-expansion ratio [a]
4	Tensile testing of the pipe body $D > 141.3$mm (5.563in.) and ≤ 323.9 mm (12.750 in.)	SMLS, HFW, SAW, or COW	Once per test unit of not more than 200 pipes with the same cold-expansion ratio [a]
5	Tensile testing of the pipe body $D > 323.9$ mm (12.750 in.)	SMLS, HFW, SAW, or COW	Once per test unit of not more than 100 pipes with the same cold-expansion ratio [a]
6	Tensile testing of the longitudinal or helical seam weld of welded pipe with $D \geq 219.1$ mm (8.625 in.) and ≤ 323.9 mm (12.750 in.)	HFW, SAW, or COW	Once per test unit of not more than 200 pipes with the same cold-expansion ratio [a,b,c]
7	Tensile testing of the longitudinal or helical seam weld of welded pipe with $D > 323.9$ mm (12.750 in.)	HFW, SAW, or COW	Once per test unit of not more than 100 pipes with the same cold-expansion ratio [a,b,c]
8	Tensile testing of the coil/plate end weld of welded pipe with $D \geq 219.1$ mm (8.625 in.)	SAWH or COWH	At least once per 50 coil/plate end welds from pipe with the same cold-expansion ratio [a,b,d]
9	CVN impact testing of the pipe body of pipe with specified outside diameter and specified wall thickness as given in Table 22	SMLS, HFW, SAW, or COW	Once per test unit of pipe with the same cold-expansion ratio [a]
10	If agreed, CVN impact testing of the longitudinal seam weld of welded pipe with specified outside diameter and specified wall thickness as given in Table 22	HFW	Once per test unit of pipe with the same cold-expansion ratio [a,b]
11	CVN impact testing of the longitudinal or helical seam weld of welded pipe with specified outside diameter and specified wall thickness as given in Table 22	SAW or COW	Once per test unit of pipe with the same cold-expansion ratio [a,b,c]
12	CVN impact testing of the coil/plate end weld of welded pipe with specified outside diameter and specified wall thickness as given in Table 22	SAWH or COWH	At least once per 50 coil/plate end welds from pipe with the same cold-expansion ratio [a,b,d]
13	If agreed, DWT testing of the pipe body of welded pipe with $D \geq 508$ mm (20.000 in.)	HFW, SAW, or COW	Once per test unit of pipe with the same cold-expansion ratio [a]

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No	Type of Inspection	Type of Pipe	Frequency of Inspection [e]
14	Guided-bend testing of the longitudinal or helical seam weld of welded pipe	SAW or COW	Once per test unit of not more than 50 lengths of pipe with the same cold-expansion ratio [a]
15	Guided-bend testing of the coil/plate end weld of welded pipe	SAWH or COWH	At least once per 50 coil/plate end welds from pipe with the same cold-expansion ratio [a,b,d]
16	Flattening test of welded pipe	HFW	As shown in Figure 6
17	Hardness testing of hard spots in cold-formed welded pipe	HFW, SAW, or COW	Any hard spot exceeding 50 mm (2.0 in.) in any direction
18	Hydrostatic testing	SMLS, HFW, SAW, or COW	Each pipe
19	Macrographic testing of the longitudinal or helical seam weld of welded pipe	SAW or COW	At least once per operating shift plus whenever any change of pipe size occurs during the operating shift; or, if 10.2.5.3 or 10.2.5.4 applies, at the beginning of the production of each combination of specified outside diameter and specified wall thickness
20	Metallographic testing (or optional hardness test in lieu of metallography) of the longitudinal seam weld of welded pipe	HFW excluding full-body normalized pipe	At least once per operating shift plus whenever changes of grade, specified outside diameter or specified wall thickness are made; plus whenever excursions from operating heat treatment conditions are encountered
21	Visual inspection	SMLS, HFW, SAW, or COW	Each pipe, except as allowed by 10.2.7.2
22	Pipe diameter and out-of-roundness	SMLS, HFW, SAW, or COW	At least once per 4 h per operating shift plus whenever any change of pipe size occurs during the operating shift
23	Wall thickness measurement	All pipe	Each pipe (see 10.2.8.5)
24	Other dimensional testing	SMLS, HFW, SAW, or COW	Random testing, with the details left to the discretion of the manufacturer
25	Weighing of pipe with $D <$ 141.3 mm (5.563 in.)	SMLS, HFW, SAW, or COW	Each pipe or each convenient group of pipe, with the choice being at the discretion of the manufacturer
26	Weighing of pipe with $D \geq$ 141.3 mm (5.563 in.)	SMLS, HFW, SAW, or COW	Each pipe
27	Length	SMLS, HFW, SAW, or COW	Each length of pipe shall be measured, except that pipe made in lengths that are uniform within 30 mm (0.1 ft) need not be individually measured, provided the accuracy of the length is verified at least once per 4 h per operating shift
28	Nondestructive inspection	SMLS, HFW, SAW, or COW	In accordance with Annex E

[a] The cold-expansion ratio (if applicable) is designated by the manufacturer and is derived using the designated before-expansion outside diameter or circumference and the after-expansion outside diameter or circumference; an increase or decrease in the cold-expansion ratio of more than 0.002 requires the creation of a new test unit.

[b] Pipe produced by each welding machine shall be tested at least once per week.

[c] For double-seam pipe, both longitudinal weld seams in the pipe selected to represent the test unit shall be tested.

[d] Applies only to finished helical seam pipe containing coil/plate end welds.

[e] "Test unit" is as defined in 3.1.60.

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5.1.2.4 Guided bend tests on four (4) transverse weld specimens:

- 2 root bends
- 2 face bends

5.1.2.5 Guided bend tests shall be in accordance with the applicable paragraph of API 5L paragraph 10.2.4.6.

5.1.2.6 Macro-graphic examination of the weld on six (6) specimens. The examination shall demonstrate that proper fusion and heat treatment have been obtained through the full thickness of the weld zone.

5.1.2.7 Aging tests (strain aging tests) shall be performed on two longitudinal pipe metal samples as follows:

5.1.2.8 One sample shall be heated to 250°C for one hour without any pre-straining the other samples shall be cold strained (20°C) by uniform tension to a deformation of three percent and then heated to 250°C for one hour.

5.1.2.9 Transverse tensile tests. (1 specimen) and Transverse Charpy impact tests (3 specimens) shall be machined from each for the aged samples and tested in accordance with section 10.2.3 of API 5L. The tensile tests and Charpy impact tests shall meet the minimum requirements of API 5L.

5.1.2.10 One longitudinal tensile test sample shall be taken approximately 90 degrees from the weld seam. The tensile test shall be conducted in accordance with section 10.2.3 of API 5L.

5.1.2.11 One longitudinal Charpy V-notch sample (three longitudinal specimens) shall be taken in the base metal approximately 90 degrees from the weld seam and tested in accordance with ASTM A370. Testing temperature shall be 0°C (32 ° F). The average energy value of three specimens shall not be less than 35 J/cm^2 with no single energy value less than 28 J/cm^2. Test specimens shall be the largest possible Charpy specimen size which can be machined from the pipe wall thickness.

5.1.2.12 All costs associated with the MPS and MPQ will be at the manufacturer's expenses. Further refer chapter-8, Table-2 & Table-3 of API 5L for different process of manufacture and PSLs.

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6 MATERIAL

6.1 In addition to the terms of the API standard, the following shall be complied with:

6.1.1 Steel used in pipe manufacturing shall be deoxidized killed steel.

6.1.2 The steel shall have a perfect crystalline texture and shall be sound clear of impurities without any crack, lamination, blow hole or inclusion of foreign matter. The steel shall be of the highest quality especially regarding its resistance to aging.

6.1.3 The manufacturer will make sure that the plates contain no defect such as lamination, blowhole, score, scale, lack of material, crack, trace of tool, or other defects likely to cause breakage, corrosion or porosity of the pipe wall.

6.1.4 The quality of the plates shall be ultrasonically tested by the manufacturer at the plate ends for a 25 mm wide strip and for four (4) bands of 25 mm wide distributed over the full width of the plate, or an equivalent process, provided that a written authorization has been given by the Purchaser.

6.1.5 No laminations are permitted in the 25mm width along the coil edges.

6.1.6 One or more of the following conditions shall result in pipe length being rejected:

6.1.6.1 Surface of laminar imperfections exceeding 100 sq.cm.

6.1.6.2 More than five imperfections between 25 and 100 sq.cm found in the path of the longitudinal or traversal scanning.

6.1.6.3 The distance between two neighboring imperfections is less than three times the greatest length of the most important imperfection.

6.1.7 For other defects detected during ultrasonic examination, acceptability tolerances will be as per API referenced code.

6.1.8 Heat analysis/testing of the plate/coil shall be in accordance with API 5L and ASTM A370.

6.1.9 Tensile (Mechanical) Properties:

Pipe furnished to this specification shall confirm to following yield strength and tensile requirement as per Table 6 and Table 7 of API 5L.

6.1.10 For material required grade, refer table 3 and table 4.

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Table 3 - Requirements for the Results of Tensile Tests for PSL 1 Pipe

Pipe Grade	Pipe Body of Seamless and Welded Pipe			Weld Seam of EW, LW, SAW, and COW Pipe
	Yield Strength [a] $R_{t0.5}$ MPa (psi) min	Tensile Strength [a] R_m MPa (psi) min	Elongation (on 50 mm or 2 in.) A_f % min	Tensile Strength [b] R_m MPa (psi) min
L175 or A25	175 (25,400)	310 (45,000)	[c]	310 (45,000)
L175P or A25P	175 (25,400)	310 (45,000)	[c]	310 (45,000)
L210 or A	210 (30,500)	335 (48,600)	[c]	335 (48,600)
L245 or B	245 (35,500)	415 (60,200)	[c]	415 (60,200)
L290 or X42	290 (42,100)	415 (60,200)	[c]	415 (60,200)
L320 or X46	320 (46,400)	435 (63,100)	[c]	435 (63,100)
L360 or X52	360 (52,200)	460 (66,700)	[c]	460 (66,700)
L390 or X56	390 (56,600)	490 (71,100)	[c]	490 (71,100)
L415 or X60	415 (60,200)	520 (75,400)	[c]	520 (75,400)
L450 or X65	450 (65,300)	535 (77,600)	[c]	535 (77,600)
L485 or X70	485 (70,300)	570 (82,700)	[c]	570 (82,700)

[a] For intermediate grades, the difference between the specified minimum tensile strength and the specified minimum yield strength for the pipe body shall be as given in the table for the next higher grade.

[b] For intermediate grades, the specified minimum tensile strength for the weld seam shall be the same value as was determined for the pipe body using footnote a).

[c] The specified minimum elongation, A_f, expressed in percent and rounded to the nearest percent, shall be as determined using the following equation:

$$A_f = C\frac{A_{xc}^{0.2}}{U^{0.9}}$$

where

C is 1940 for calculations using SI units and 625,000 for calculations using USC units;

A_{xc} is the applicable tensile test piece cross-sectional area, expressed in square millimeters (square inches), as follows:

1) for circular cross-section test pieces, 130 mm² (0.20 in.²) for 12.7 mm (0.500 in.) and 8.9 mm (0.350 in.) diameter test pieces; 65 mm² (0.10 in.²) for 6.4 mm (0.250 in.) diameter test pieces;

2) for full-section test pieces, the lesser of a) 485 mm² (0.75 in.²) and b) the cross-sectional area of the test piece, derived using the specified outside diameter and the specified wall thickness of the pipe, rounded to the nearest 10 mm² (0.01 in.²);

3) for strip test pieces, the lesser of a) 485 mm² (0.75 in.²) and b) the cross-sectional area of the test piece, derived using the specified width of the test piece and the specified wall thickness of the pipe, rounded to the nearest 10 mm² (0.01 in.²);

U is the specified minimum tensile strength, expressed in megapascals (pounds per square inch).

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Table 4 - Requirements for the Results of Tensile Tests for PSL 2 Pipe

Pipe Grade	Pipe Body of Seamless and Welded Pipe						Weld Seam of HFW, SAW and COW Pipe
	Yield Strength [a] $R_{t0.5}$ MPa (psi)		Tensile Strength [a] R_m MPa (psi)		Ratio [a,c] $R_{t0.5}/R_m$	Elongation (on 50 mm or 2 in.) A_f %	Tensile Strength [d] R_m MPa (psi)
	min	max	min	max	max	min	min
L245R or BR L245N or BN L245Q or BQ L245M or BM	245 (35,560)	450 (65,300) [e]	415 (60,200)	655 (95,000)	0.93	[f]	415 (60,200)
L290R or X42R L290N or X42N L290Q or X42Q L290M or X42M	290 (42,100)	495 (71,800)	415 (60,200)	655 (95,000)	0.93	[f]	415 (60,200)
L320N or X46N L320Q or X46Q L320M or X46M	320 (46,400)	525 (76,100)	435 (63,100)	655 (95,000)	0.93	[f]	435 (63,100)
L360N or X52N L360Q or X52Q L360M or X52M	360 (52,200)	530 (76,900)	460 (66,700)	760 (110,200)	0.93	[f]	460 (66,700)
L390N or X56N L390Q or X56Q L390M or X56M	390 (56,600)	545 (79,000)	490 (71,100)	760 (110,200)	0.93	[f]	490 (71,100)
L415N or X60N L415Q or X60Q L415M or X60M	415 (60,200)	565 (81,900)	520 (75,400)	760 (110,200)	0.93	[f]	520 (75,400)
L450Q or X65Q L450M or X65M	450 (65,300)	600 (87,000)	535 (77,600)	760 (110,200)	0.93	[f]	535 (77,600)
L485Q or X70Q L485M or X70M	485 (70,300)	635 (92,100)	570 (82,700)	760 (110,200)	0.93	[f]	570 (82,700)
L555Q or X80Q L555M or X80M	555 (80,500)	705 (102,300)	625 (90,600)	825 (119,700)	0.93	[f]	625 (90,600)
L625M or X90M	625 (90,600)	775 (112,400)	695 (100,800)	915 (132,700)	0.97	[f]	695 (100,800)
L625Q or X90Q	625 (90,600)	775 (112,400)	695 (100,800)	915 (132,700)	0.97 [g]	[f]	—
L690M or X100M	690 (100,100) [b]	840 (121,800) [b]	760 (110,200)	990 (143,600)	0.97 [h]	[f]	760 (110,200)
L690Q or X100Q	690 (100,100) [b]	840 (121,800) [b]	760 (110,200)	990 (143,600)	0.97 [h]	[f]	—
L830M or X120M	830 (120,400) [b]	1050 (152,300) [b]	915 (132,700)	1145 (166,100)	0.99 [h]	[f]	915 (132,700)

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[a] For intermediate grades, the difference between the specified maximum yield strength and the specified minimum yield strength shall be as given in the table for the next higher grade, and the difference between the specified minimum tensile strength and the specified minimum yield strength shall be as given in the table for the next higher grade; for intermediate grades up to Grade L320 or X46, the tensile strength shall be ≤ 655 MPa (95,000 psi); for intermediate grades greater than Grade L320 or X46 and lower than Grade L555 or X80, the tensile strength shall be ≤ 760 MPa (110,200 psi); for intermediate grades higher than Grade L555 or X80, the maximum permissible tensile strength shall be obtained by interpolation; for SI units, the calculated value shall be rounded to the nearest 5 MPa; for USC units, the calculated value shall be rounded to the nearest 100 psi.

[b] For grades > L625 or X90, $R_{p0.2}$ applies.

[c] This limit applies for pipe with $D > 323.9$ mm (12.750 in.).

[d] For intermediate grades, the specified minimum tensile strength for the weld seam shall be the same value as was determined for the pipe body using footnote a).

[e] For pipe requiring longitudinal testing, the maximum yield strength shall be ≤ 495 MPa (71,800 psi).

[f] The specified minimum elongation, A_f, shall be as determined using the following equation:

$$A_f = C\frac{A_{xc}^{0.2}}{U^{0.9}}$$

where

C is 1940 for calculations using SI units and 625,000 for calculations using USC units;

A_{xc} is the applicable tensile test piece cross-sectional area, expressed in square millimeters (square inches), as follows:

1) for circular cross-section test pieces, 130 mm^2 (0.20 in.^{2}) for 12.7 mm (0.500 in.) and 8.9 mm (0.350 in.) diameter test pieces; 65 mm^2 (0.10 in.^{2}) for 6.4 mm (0.250 in.) diameter test pieces;
2) for full-section test pieces, the lesser of a) 485 mm^2 (0.75 in.^{2}) and b) the cross-sectional area of the test piece, derived using the specified outside diameter and the specified wall thickness of the pipe, rounded to the nearest 10 mm^2 (0.01 in.^{2});
3) for strip test pieces, the lesser of a) 485 mm^2 (0.75 in.^{2}) and b) the cross-sectional area of the test piece, derived using the specified width of the test piece and the specified wall thickness of the pipe, rounded to the nearest 10 mm^2 (0.01 in.^{2});

U is the specified minimum tensile strength, expressed in megapascals (pounds per square inch).

[g] Lower values of $R_{t0.5}/R_m$ may be specified by agreement. For grades > L625 or X90, $R_{p0.2}/R_m$ applies. Lower values of $R_{p0.2}/R_m$ may be specified by agreement.

6.1.11 Manufacturer have to submit reports from independent internationally reputable laboratories for mechanical properties and chemical analysis.

6.2 Chemical Properties

6.2.1 Chemical Composition

6.2.1.1 The chemical composition of pipe furnished to this specification as determined by heat analysis shall confirm to the chemical requirement given in below API table 5 for PSL-1 pipe (Chemical Composition for PSL-I pipe with t≤25.0 mm) and table 6 for PSL-2 pipe (Chemical Composition for PSL 2 pipe with t≤25.0 mm).

6.2.2 Acceptance Criteria

6.2.2.1 For PSL 2 pipe with t ≤ 25.0 mm (0.984 in.), the chemical composition for standard grades shall be as given in Table 6, and the chemical composition for intermediate grades shall be as agreed, but consistent with those given in Table 6.

6.2.2.2 For PSL 1 or PSL 2 pipe with t > 25.0 mm (0.984 in.), the chemical composition shall

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be as agreed, with the requirements of Tables 5 and 6 being amended as appropriate.

6.2.2.3 For PSL 2 pipe with a product analysis carbon mass fraction equal to or less than 0.12 %, the carbon equivalent, CE_{Pcm}, shall be determined using Equation:

$$CE_{Pcm} = C + \frac{Si}{30} + \frac{Mn}{20} + \frac{Cu}{20} + \frac{Ni}{60} + \frac{Cr}{20} + \frac{Mo}{15} + \frac{V}{10} + 5B$$

Where, the symbols for the chemical elements represent the mass fraction in percent (see Table 6). If the heat analysis for boron is less than 0.0005 %, then it is not necessary for the product analysis to include boron, and the boron content may be considered to be zero for the CE_{Pcm} calculation.

6.2.2.4 For PSL 2 pipe with a product analysis carbon mass fraction greater than 0.12 %, the carbon equivalent, CE_{IIW}, shall be determined using Equation:

$$CE_{IIW} = C + \frac{Mn}{6} + \frac{(Cr + Mo + V)}{5} + \frac{(Ni + Cu)}{15}$$

Where, the symbols for the chemical elements represent the mass fraction in percent (see Table 6).

Table 5 - Chemical Composition for PSL 1 Pipe with $t \leq 25.0$ mm (0.984 in.)

Steel Grade (Steel Name)	Mass Fraction, Based on Heat and Product Analyses [a,g] %							
	C	Mn	P		S	V	Nb	Ti
	max [b]	max [b]	min	max	max	max	max	max
Seamless Pipe								
L175 or A25	0.21	0.60	—	0.030	0.030	—	—	—
L175P or A25P	0.21	0.60	0.045	0.080	0.030	—	—	—
L210 or A	0.22	0.90	—	0.030	0.030	—	—	—
L245 or B	0.28	1.20	—	0.030	0.030	c,d	c,d	d
L290 or X42	0.28	1.30	—	0.030	0.030	d	d	d
L320 or X46	0.28	1.40	—	0.030	0.030	d	d	d
L360 or X52	0.28	1.40	—	0.030	0.030	d	d	d
L390 or X56	0.28	1.40	—	0.030	0.030	d	d	d
L415 or X60	0.28 [e]	1.40 [e]	—	0.030	0.030	f	f	f

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Steel Grade (Steel Name)	Mass Fraction, Based on Heat and Product Analyses [a,g] %							
	C	Mn	P		S	V	Nb	Ti
	max [b]	max [b]	min	max	max	max	max	max
Seamless Pipe								
L450 or X65	0.28 [e]	1.40 [e]	—	0.030	0.030	[f]	[f]	[f]
L485 or X70	0.28 [e]	1.40 [e]	—	0.030	0.030	[f]	[f]	[f]
Welded Pipe								
L175 or A25	0.21	0.60	—	0.030	0.030	—	—	—
L175P or A25P	0.21	0.60	0.045	0.080	0.030	—	—	—
L210 or A	0.22	0.90	—	0.030	0.030	—	—	—
L245 or B	0.26	1.20	—	0.030	0.030	[c,d]	[c,d]	[d]
L290 or X42	0.26	1.30	—	0.030	0.030	[d]	[d]	[d]
L320 or X46	0.26	1.40	—	0.030	0.030	[d]	[d]	[d]
L360 or X52	0.26	1.40	—	0.030	0.030	[d]	[d]	[d]
L390 or X56	0.26	1.40	—	0.030	0.030	[d]	[d]	[d]
L415 or X60	0.26 [e]	1.40 [e]	—	0.030	0.030	[f]	[f]	[f]
L450 or X65	0.26 [e]	1.45 [e]	—	0.030	0.030	[f]	[f]	[f]
L485 or X70	0.26 [e]	1.65 [e]	—	0.030	0.030	[f]	[f]	[f]

[a] Cu ≤ 0.50 %; Ni ≤ 0.50 %; Cr ≤ 0.50 % and Mo ≤ 0.15 %.

[b] For each reduction of 0.01 % below the specified maximum concentration for carbon, an increase of 0.05 % above the specified maximum concentration for Mn is permissible, up to a maximum of 1.65 % for grades ≥ L245 or B, but ≤ L360 or X52; up to a maximum of 1.75 % for grades > L360 or X52, but < L485 or X70; and up to a maximum of 2.00 % for Grade L485 or X70.

[c] Unless otherwise agreed, Nb + V ≤ 0.06 %.

[d] Nb + V + Ti ≤ 0.15 %.

[e] Unless otherwise agreed.

[f] Unless otherwise agreed, Nb + V + Ti ≤ 0.15 %.

[g] No deliberate addition of B is permitted and the residual B ≤ 0.001 %.

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Table 6 - Chemical Composition for PSL 2 Pipe with $t \leq 25.0$ mm (0.984 in.)

Steel Grade (Steel Name)	Mass Fraction, Based on Heat and Product Analyses, % max									Carbon Equivalent[a] % max	
	C[b]	Si	Mn[b]	P	S	V	Nb	Ti	Other	CE_{IIW}	CE_{Pcm}
Seamless and Welded Pipe											
L245R or BR	0.24	0.40	1.20	0.025	0.015	c	c	0.04	e,j	0.43	0.25
L290R or X42R	0.24	0.40	1.20	0.025	0.015	0.06	0.05	0.04	e,j	0.43	0.25
L245N or BN	0.24	0.40	1.20	0.025	0.015	c	c	0.04	e,j	0.43	0.25
L290N or X42N	0.24	0.40	1.20	0.025	0.015	0.06	0.05	0.04	e,j	0.43	0.25
L320N or X46N	0.24	0.40	1.40	0.025	0.015	0.07	0.05	0.04	d,e,j	0.43	0.25
L360N or X52N	0.24	0.45	1.40	0.025	0.015	0.10	0.05	0.04	d,e,j	0.43	0.25
L390N or X56N	0.24	0.45	1.40	0.025	0.015	0.10[f]	0.05	0.04	d,e,j	0.43	0.25
L415N or X60N	0.24[f]	0.45[f]	1.40[f]	0.025	0.015	0.10[f]	0.05[f]	0.04[f]	g,h,j	As agreed	
L245Q or BQ	0.18	0.45	1.40	0.025	0.015	0.05	0.05	0.04	e,j	0.43	0.25
L290Q or X42Q	0.18	0.45	1.40	0.025	0.015	0.05	0.05	0.04	e,j	0.43	0.25
L320Q or X46Q	0.18	0.45	1.40	0.025	0.015	0.05	0.05	0.04	e,j	0.43	0.25
L360Q or X52Q	0.18	0.45	1.50	0.025	0.015	0.05	0.05	0.04	d,e,j	0.43	0.25
L390Q or X56Q	0.18	0.45	1.50	0.025	0.015	0.07	0.05	0.04	g	h,j	0.43	0.25
L415Q or X60Q	0.18[f]	0.45[f]	1.70[f]	0.025	0.015	g	g	g	g	h,j	0.43	0.25
L450Q or X65Q	0.18[f]	0.45[f]	1.70[f]	0.025	0.015	g	g	g	g	h,j	0.43	0.25
L485Q or X70Q	0.18[f]	0.45[f]	1.80[f]	0.025	0.015	g	g	g	g	i,j	As agreed	
L555Q or X80Q	0.18[f]	0.45[f]	1.90[f]	0.025	0.015	g	g	g	g	j,k	As agreed	
L625Q or X90Q	0.16[f]	0.45[f]	1.90	0.020	0.010	g	g	g	g	j,k	As agreed	
L690Q or X100Q	0.16[f]	0.45[f]	1.90	0.020	0.010	g	g	g	g	j,k	As agreed	
Welded Pipe											
L245M or BM	0.22	0.45	1.20	0.025	0.015	0.05	0.05	0.04	e,j	0.43	0.25
L290M or X42M	0.22	0.45	1.30	0.025	0.015	0.05	0.05	0.04	e,j	0.43	0.25
L320M or X46M	0.22	0.45	1.30	0.025	0.015	d	d	d	d,j	0.43	0.25
L360M or X52M	0.22	0.45	1.40	0.025	0.015	d	d	d	e,j	0.43	0.25
L390M or X56M	0.22	0.45	1.60	0.025	0.015	g	g	g	h,j	0.43	0.25
L415M or X60M	0.12[f]	0.45[f]	1.60[f]	0.025	0.015	g	g	g	h,j	0.43	0.25
L450M or X65M	0.12[f]	0.45[f]	1.60[f]	0.025	0.015	g	g	g	h,j	0.43	0.25

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Steel Grade (Steel Name)	Mass Fraction, Based on Heat and Product Analyses % max									Carbon Equivalent [a] % max	
	C [b]	Si	Mn [b]	P	S	V	Nb	Ti	Other	CE_{IIW}	CE_{Pcm}
Welded Pipe											
L485M or X70M	0.12 [f]	0.45 [f]	1.70 [f]	0.025	0.015	g	g	g	N	0.43	0.25
L555M or X80M	0.12 [f]	0.45 [f]	1.85 [f]	0.025	0.015	g	g	g	U	0.43 [f]	0.25
L625M or X90M	0.10	0.55 [f]	2.10 [f]	0.020	0.010	g	g	g	U	—	0.25
L690M or X100M	0.10	0.55 [f]	2.10 [f]	0.020	0.010	g	g	g	U		0.25
L830M or X120M	0.10	0.55 [f]	2.10 [f]	0.020	0.010	g	g	g	U		0.25

[a] Based on product analysis, for seamless pipe with $t > 20.0$ mm (0.787 in.), the CE limits shall be as agreed; the CE_{IIW} limits apply if $C > 0.12$ % and the CE_{Pcm} limits apply if $C \leq 0.12$ %.

[b] For each reduction of 0.01 % below the specified maximum for C, an increase of 0.05 % above the specified maximum for Mn is permissible, up to a maximum of 1.65 % for grades ≥ L245 or B, but ≤ L360 or X52; up to a maximum of 1.75 % for grades > L360 or X52, but < L485 or X70; up to a maximum of 2.00 % for grades ≥ L485 or X70, but ≤ L555 or X80; and up to a maximum of 2.20 % for grades > L555 or X80.

[c] Unless otherwise agreed, Nb + V ≤ 0.06 %.

[d] Nb + V + Ti ≤ 0.15 %.

[e] Unless otherwise agreed, Cu ≤ 0.50 %; Ni ≤ 0.30 %; Cr ≤ 0.30 % and Mo ≤ 0.15 %.

[f] Unless otherwise agreed.

[g] Unless otherwise agreed, Nb + V + Ti ≤ 0.15 %.

[h] Unless otherwise agreed, Cu ≤ 0.50 %; Ni ≤ 0.50 %; Cr ≤ 0.50 % and Mo ≤ 0.50 %.

[i] Unless otherwise agreed, Cu ≤ 0.50 %; Ni ≤ 1.00 %; Cr ≤ 0.50 % and Mo ≤ 0.50 %.

[j] B ≤ 0.004 %.

[k] Unless otherwise agreed, Cu ≤ 0.50 %; Ni ≤ 1.00 %; Cr ≤ 0.55 % and Mo ≤ 0.80 %.

[l] For PSL 2 pipe grades except those grades to which footnote j) already applies, the following applies: unless otherwise agreed no intentional addition of B is permitted and residual B ≤ 0.001 %.

6.3 Manufacturer have to submit reports from independent internationally reputable laboratories for mechanical properties and chemical analysis.

6.4 Heat Analysis

The Purchaser shall be supplied with the report giving the heat analyses of each heat of steel used in the manufacture of pipe furnished under the present specification. For Heat Analysis requirement refer table 17 of API 5L for PSL-1 pipes and table 18 of API 5L for PSL-2 pipes.

6.5 Product Analysis

The manufacturer shall supply the Purchaser with a report on check analyses taken from finished pipes. In addition to the API Standard requirements, the pipes from which samples shall be taken will be selected by the Purchaser/Purchaser's representative

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among the ten (10) first pipe lengths coming from the same heat, for each heat. The permissible variations will be within the limits specified in standard API 5L.

6.6 Mill Control Analysis

The Purchaser shall be provided with the complete set of records pertaining to this step.

6.7 Chemical Analysis Procedures

The chemical analysis procedures shall be in accordance with ASTM A751 code.

6.8 Mechanical Properties & Tests

6.8.1 Tensile Properties

6.8.1.1 The Mechanical analysis procedure shall be in accordance with ASTM A-370.

Table 7 - Number, Orientation, and Location of Test Pieces per Sample for Mechanical Tests for PSL 1 Pipe

Type of Pipe	Sample Location	Type of Test	Number, Orientation, and Location of Test Pieces per Sample [a]			
			Specified Outside Diameter D mm (in.)			
			< 219.1 (8.625)	219.1 (8.625) to < 323.9 (12.750)	323.9 (12.750) to < 508 (20.000)	≥ 508 (20.000)
SMLS, not cold-expanded [see Figure 5 a)]	Pipe body	Tensile	1L [b]	1L	1L	1L
SMLS, cold-expanded [see Figure 5 a)]	Pipe body	Tensile	1L [b]	1T [c]	1T [c]	1T [c]
CW [see Figure 5 b)]	Pipe body	Tensile	1L90 [b]	—	—	—
	Pipe body and weld	Bend	1 [e]	—	—	—
	Pipe body and weld	Flattening	As shown in Figure 6			
LW [see Figure 5 b)]	Pipe body	Tensile	1L90 [b]	1T180 [c]	1T180 [c]	1T180 [c]
	Seam weld	Tensile	—	1W	1W	1W
	Seam weld	Guided-bend	—	—	2W	2W
	Pipe body and weld	Flattening	As shown in Figure 6			

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Type of Pipe	Sample Location	Type of Test	Number, Orientation, and Location of Test Pieces per Sample[a]			
			Specified Outside Diameter *D* mm (in.)			
			< 219.1 (8.625)	219.1 (8.625) to < 323.9 (12.750)	323.9 (12.750) to < 508 (20.000)	≥ 508 (20.000)
LFW or HFW [see Figure 5 b)]	Pipe body	Tensile	1L90 [b]	1T180 [c]	1T180 [c]	1T180 [c]
	Seam weld	Tensile	—	1W	1W	1W
	Pipe body and weld	Bend	1 [e]	—	—	—
	Pipe body and weld	Flattening	As shown in Figure 6			
SAWL or COWL [see Figure 5 b)]	Pipe body	Tensile	1L90 [b]	1T180 [c]	1T180 [c]	1T180 [c]
	Seam weld	Tensile	—	1W	1W	1W [d]
	Seam weld	Guided-bend	2W	2W	2W	2W [d]
SAWH or COWH [see Figure 5 c)]	Pipe body	Tensile	1L [b]	1T [c]	1T [c]	1T [c]
	Seam weld	Tensile	—	1W	1W	1W
	Seam weld	Guided-bend	2W	2W	2W	2W
	Coil/plate end weld	Guided-bend	2WS	2WS	2WS	2WS

[a] See Figure 5 for an explanation of the symbols used to designate orientation and location of samples and test pieces.

[b] Full-section longitudinal test pieces may be used at the option of the manufacturer.

[c] If agreed, annular test pieces may be used for the determination of transverse yield strength by the hydraulic ring expansion test in accordance with ASTM A370.

[d] For double-seam pipe, both longitudinal weld seams in the pipe selected to represent the test unit shall be tested.

[e] Testing limited to pipe of $D \leq 60.3$ mm (2.375 in.).

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Table 8- Number, Orientation, and Location of Test Pieces per Sample for Mechanical Tests for PSL 2 Pipe

Type of Pipe	Sample Location	Type of Test	Number, Orientation, and Location of Test Pieces per Sample [a]			
			Specified Outside Diameter D mm (in.)			
			< 219.1 (8.625)	219.1 (8.625) to < 323.9 (12.750)	323.9 (12.750) to < 508 (20.000)	≥ 508 (20.000)
SMLS, not cold-expanded [see Figure 5 a)]	Pipe body	Tensile	1L [b]	1L [c,d]	1L [c,d]	1L [c,d]
		CVN	3T	3T	3T	3T
SMLS, cold-expanded [see Figure 5 a)]	Pipe body	Tensile	1L [b]	1T [d]	1T [d]	1T [d]
		CVN	3T	3T	3T	3T
HFW [see Figure 5 b)]	Pipe body	Tensile	1L90 [b]	1T180 [d]	1T180 [d]	1T180 [d]
		CVN	3T90	3T90	3T90	3T90
		DWT	—	—	—	2T90
	Seam weld	Tensile	—	1W	1W	1W
		CVN	3W	3W	3W	3W
	Pipe body and weld	Flattening	As shown in Figure 6			
SAWL or COWL [see Figure 5 b)]	Pipe body	Tensile	1L90 [b]	1T180 [d]	1T180 [d]	1T180 [d]
		CVN	3T90	3T90	3T90	3T90
		DWT	—	—	—	2T90
	Seam weld	Tensile	—	1W	1W	1W [e]
		CVN	3W and 3HAZ	3W and 3HAZ	3W and 3HAZ	3W [e] and 3HAZ [e]
		Guided-bend	2W [f]	2W [f]	2W [f]	2W [e]
SAWH or COWH [see Figure 5 c)]	Pipe body	Tensile	1L [b]	1T [d]	1T [d]	1T [d]
		CVN	3T	3T	3T	3T
		DWT	—	—	—	2T
	Seam weld	Tensile	—	1W	1W	1W
		CVN	3W and 3HAZ	3W and 3HAZ	3W and 3HAZ	3W and 3HAZ
		Guided-bend	2W [f]	2W [f]	2W [f]	2W [f]
	Coil/plate end weld	Tensile	—	1WS	1WS	1WS
		CVN	3WS and 3HAZ	3WS and 3HAZ	3WS and 3HAZ	3WS and 3HAZ
		Guided-bend	2WS [f]	2WS [f]	2WS [f]	2WS [f]

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[a] See Figure 5 for an explanation of the symbols used to designate orientation and location.
[b] Full-section longitudinal test pieces may be used at the option of the manufacturer.
[c] If agreed, transverse test pieces may be used.
[d] If agreed, annular test pieces may be used for the determination of transverse yield strength by the hydraulic ring expansion test in accordance with ASTM A370.
[e] For double-seam pipe, both longitudinal-weld seams in the pipe selected to represent the test unit shall be tested.
[f] For pipe with ≥ 19.0 mm (0.748 in.), the test pieces may be machined to provide a rectangular cross-section having a thickness of 18.0 mm (0.709 in.).

6.8.2 Manipulation test for submerged-Arc Welds

Submerged arc welds shall be tested by the guided-bend test. The test specimens shall be taken from the helical weld in a length of pipe from each lot of 50 lengths or less of each combination of outside diameter, wall thickness and grade and from a skelp end weld in a length of pipe from each lot of 50 lengths or less of each combination of outside dia., wall thickness, and grade of finished helical seam pipe containing skelp end welds. The test specimen shall not contain repair welds.

6.8.3 Tensile Testing

6.8.3.1 Tensile tests and weld tensile tests shall be performed on one pipe from each lot of pipes.

6.8.3.2 Tensile testing frequency shall be in accordance with API 5L or the following lot definition, whichever yields the greater number of tests. The term "lot" is defined herein as a maximum produced length of 1,000 meters of pipe.

6.8.4 Fracture Toughness Tests

6.8.4.1 Fracture toughness tests shall be conducted in accordance with API 5L SR5 and ASTM A370. All pipe diameter and wall thickness combinations on the pipe order shall be Charpy V-notch impact tested.

6.8.4.2 Six transverse Charpy specimens (three (3) with the notch in the base metal and three (3) with the notch in the weld) shall be taken from one length of pipe from each lot of 100 lengths per heat produced.

6.8.4.3 Testing temperature shall be 0°C (32°F).

6.8.4.4 The average energy value of three specimens shall not be less than 35 J/cm^2 with no single energy value less than 28 J/cm^2.

6.8.4.5 Charpy test specimens shall be the largest possible Charpy specimen size which can be machined from the pipe wall thickness.

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6.8.5 Hardness Tests

6.8.5.1 Cross section samples of the weld zone shall be cut from one (1) pipe for each lot of pipes and prepared for hardness testing.

6.8.5.2 Hardness tests shall be conducted in the base metal, fusion zone and heat affected zones. Hardness traverses shall be made on the inside, outside and appropriate mid-point of wall thickness of the cross section specimens. Each traverse shall include base metal and heat-affected zones on both sides of the weld and fusion zone.

6.8.5.3 The maximum hardness shall not exceed 260 Vickers (HV5).

7 DIMENSIONS, MASS & TOLERANCES

7.1 Dimensions

7.1.1 The pipe shall be delivered to the dimensions specified in the purchase order, subject to the applicable tolerances.

7.2 Weight

7.2.1 The pipe shall be weighed either individually or in convenient lots and truck load weight thus determined.

7.2.2 Threaded pipes can be weighed with the thread protectors for which proper allowance shall be made.

7.2.3 The tolerance for weight shall be within tolerances -0% to +5% of specified mass per unit length.

7.2.4 The manufacturer is liable to supply the quantity in meters as per purchase order.

7.3 Tolerances for Diameter, Wall Thickness, Length and Straightness

7.3.1 The pipe ovality and high & low problems in a pipe back should be strictly controlled, so that problem encountered during field welding is minimized. Tolerance for Diameter at Pipe Ends shall generally be in accordance with Table 10 of API Spec 5L with the exception that Diameter out of roundness (Maximum differential between Minimum and Maximum Diameters) shall not exceed 0.125 inch.

7.3.2 The wall thickness at any location shall be within tolerances -0% to +5% of specified wall thickness except that the weld area shall not be limited by the plus tolerance. Wall thickness, measurements shall be carried out in accordance with para 9.11.3 of API Spec 5L.

7.3.3 The welded Pipes shall be furnished in double random lengths 12 meters (40 feet) from size 4" and above. The average length of pipe for each carload of 40,000 lbs. shall not

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be less than thirty-five (35) feet. No more than ten percent of length shall be shorter than 26.3 feet.

Further to above the pipe size from ½" to 24" welded/Seamless pipe length 20 feet (6 Meter) will be acceptable to purchaser subject to specified in the SOR/Purchase order.

7.3.4 The tolerances for length shall be as follows:

7.3.4.1 Unless otherwise agreed, random lengths shall be delivered within the tolerances given in Table-12 of API 5L.

7.3.4.2 Approximate lengths shall be delivered within a tolerance of ± 500 mm (20 in.).

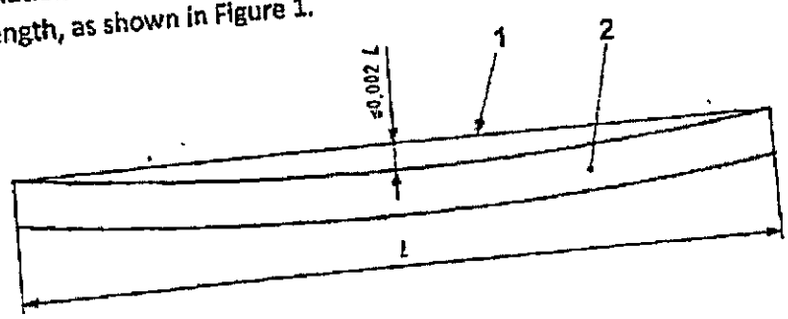
7.3.4.3 Jointers are not recommended as per SSGC practice. If it is agreed than following shall be applicable as per API 5L (9.11.3.3)

7.3.4.4 If the supply of jointers is agreed, jointers comprising two pieces welded together to make a length shorter than 15.0 m (49.2 ft) may be furnished to a maximum of 5 % of the order item, or as agreed.

7.3.4.5 If the supply of jointers is agreed, jointers comprising two pieces welded together to make a length 15.0 m (49.2 ft) or longer may be furnished for the entire order item or any portion thereof.

7.3.4.6 The tolerances for straightness shall be as follows.

7.3.4.7 The total deviation from a straight line, over the entire pipe length, shall be ≤ 0.2 % of the pipe length, as shown in Figure 1.



Key
1 taut string or wire
2 pipe

Figure 1—Measuring Full-length Straightness

7.3.4.8 The local deviation from a straight line in the 1.5 m (5.0 ft) portion at each pipe end shall be ≤ 3.2 mm (0.125 in.), as shown in Figure 2.

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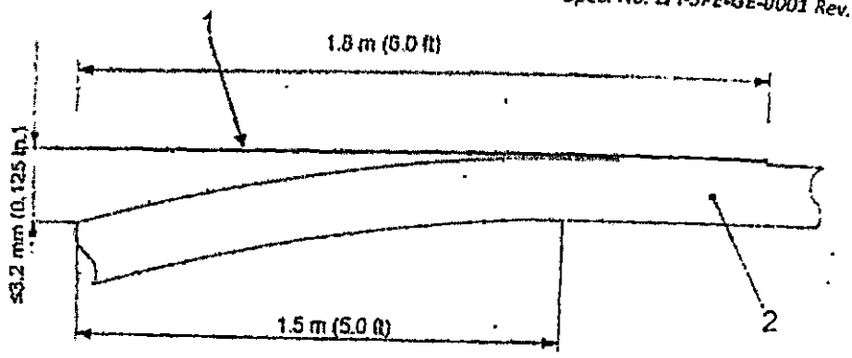

Key
1 straight line
2 pipe

Figure 2—Measuring End Straightness

7.4 Finish of Pipe Ends

7.4.1 Grade L175P or A25P PSL 1 pipe shall be furnished with threaded ends; other grades of PSL 1 pipe shall be furnished with plain ends, unless another acceptable end finish is specified in the purchase order. PSL 2 pipe shall be furnished with plain ends. Pipe ends shall also be free from burrs.

7.4.2 Each length of the pipe shall be furnished with ends beveled as per Schedule of Requirement to an angle of thirty degrees (30°) plus five degrees (5°), minus zero degree (-0°) from the perpendicular to the axis of the pipe and with a root face of 1/16 inch ± 1/32 inch. Tolerances & removal of burrs will be according to paragraph 9.11 and 9.12 of API Specification 5L.

7.4.3 The supplier shall provide bevel guards/end caps as per schedule of requirement for each end of the pipe. Bevel guards/End caps shall be robust to withstand handling during loading/unloading. Bevel guard shall cover both inside and outside of the pipe at least 4 inch of pipe ends and also supplier should ensure for arrangement of strengthen end cap fixing at both end of pipe at mill prior to Ex-works deliver to make sure the line pipe safety during long storage in an open environment during shipment or storage at Buyer's locations. Bevel Guards / End Cap as per schedule of requirement details shall be submitted with bid.

7.5 Threaded Ends (PSL 1 Only)

7.5.1 Threaded ends shall conform to the threading, thread inspection, and gauging requirements of API 5B.

7.5.2 One end of each length of threaded pipe shall be provided with a coupling conforming

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to the Requirements of Annex F of API 5L, and the other end shall be provided with thread protection conforming to the Requirements of 12.2.

7.5.3 Couplings shall be screwed onto the pipe handling-tight or, if agreed, power-tight.

7.6 Belled Ends (PSL 1 Only)
For belled end pipe clause 9.12.3 of API 5L shall be applicable.

7.7 Ends Prepared for Special Couplings (PSL 1 Only)
For End preparation clause 9.12.4 of API 5L shall be applicable.

7.8 Plain Ends
For Plain End preparation clause 9.12.5 of API 5L shall be applicable.

8 LINE PIPE FIELD WELDABILITY

8.1 Bidder/Supplier shall confirm and certify that the line pipe to be supplied shall be suitable for field welding with electrodes complying with AWS classification or equivalent standards manufactured in all respect to AWS specification A 5.1 and A 5.5 or ASME specification for mild steel or low alloy steel, high cellulosic covered fast freeze arc welding electrodes as applicable to produce crack free welds specifically for offered line pipe.

8.2 Bidder shall elaborate the field welding of line pipe chemistry and any pre heat treatment requirement for the offered line pipe. The bidder may also propose his recommendations with respect to suitability of the Welding electrodes/flux wire (Both).

9 MARKING

Pipe markings shall include the following information as per 11.2 of API 5L sequentially, as applicable:

- Name or mark of the manufacturer of the pipe (X)
- P.O. No.
- Project Name
- "API Spec 5L" shall be marked when the product is in complete compliance with this specification, appropriate annexes, and this section. Products in compliance with multiple compatible standards may be marked with the name of each standard;
- Specified outside diameter
- Specified wall thickness

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- Pipe steel grade
- PSL designation
- Type of pipe
- Mark of the customer's inspection representative
- An identification number

9.1 Pipe Manufacturer shall also mention below details on the outer surface of the pipe;

- Pipe No.
- Heat No.
- Lot. No.
- Material Grade

9.2 API Spec 5L Registered Mono shall be marked when the product is in complete compliance with this specification, appropriate annexes, and this section.

10 TESTING AND INSPECTION

10.1 Hydrostatic Test

10.1.1 Test pressures for each size of SMLS pipe and for welded pipe with D ≤ 457 mm (18.000 in.) shall be held for not less than 5 seconds as per 10.2.6, API-5L.

10.1.2 Test pressures for welded pipe with D > 457 mm (18.000 in.) shall be held for not less than 10 seconds as per 10.2.6 API-5L.

10.1.3 For threaded-and-coupled pipe, the test shall be applied with the couplings made up power-tight if agreed, except that pipe with D > 323.9 mm (12.375 in.) may be tested in the plain-end condition.

10.1.4 For threaded pipe furnished with couplings made up handling-tight, the hydrostatic test shall be made on the pipe in the plain-end, threads-only, or coupled condition unless a specific condition is specified in the purchase order.

10.1.5 The purchaser may specify bursting test on random specimen for diameter as per Schedule of requirement of pipes up to a limit of 2 specimen for the whole order. This limit is exclusive of re-tests necessary due to failure of any specimen.

10.2 Burst Test and DWT Test

10.2.1 Pipe Burst Test shall be performed in accordance with API 5L (as per Annexure G).

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10.2.2 DWT Test shall be performed as per API RP 5L3.

10.3 Hydrostatic Test Pressure

10.3.1 Test pressures for light-wall threaded pipe shall be as given in Table 24 of API-5L.

10.3.2 Test pressures for heavy-wall threaded pipe shall be as given in Table 25 of API-5L.

10.3.2.1 The hydrostatic test pressure, P, expressed in Mega Pascals (pounds per square inch), for plain-end pipe shall be determined by using Equation given below, with the results rounded to the nearest 0.1 MPa (10 psi).

$P = 2\,St/D$

Where,

- S is the hoop stress, expressed in Mega Pascals (pounds per square inch), equal to 90(%) percent of the specified minimum yield strength of the pipe, as given in Table 26 of API 5L;
- t is the specified wall thickness, expressed in millimeters (inches);
- D is the specified outside diameter, expressed in millimeters (inches).

10.4 Non-destructive testing

10.4.1 The weld seam of each welded pipes furnished to this specification shall be inspected non-destructively for the full length (100%) in accordance with methods specified below:

10.4.1.1 Electric welded pipe shall be inspected for surface and sub-surface defects by ultrasonic or electromagnetic methods in accordance with methods specified by API specification, 5L.

10.4.1.2 Pipe ends shall be inspected by using hand-held ultrasonic shear wave equipment or other NDT method agreed by the manufacturer and purchaser.

10.4.1.3 For ultrasonic test high angle multi-direction probes (transducer) should preferably use.

10.4.1.4 All defect in pipe body and seam e.g. lap, pit seam, rolled, in slag, upturned fibers, cold welds with lamination, hard spot as indicated shall be dealt with as per AP specification 5L.

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10.4.1.5 Cracks, leaks, lack of fusion, penetrator: The section of pipe containing racks, lack of fusion, penetrator shall be rejected. The section of the pipe containing cracks, lack of fusion, penetrators shall be rejected. The section of the pipe shall be cut off within the limits of the requirement on length.

10.4.1.6 Submerged arc welded pipes shall be inspected full length, by radiological method in accordance with methods specified by API specification 5L.

10.4.1.7 The weld & parent metal imperfection and defects, such as size and distribution of slag inclusion, gas pocket discontinuities, cracks, leak, lack of penetration, lack of complete fusion, arc burn, undercut, under fills, hard spots, laminations, sweats and other defects as observed during radiographic examination shall be dealt with as per API specification 5L.The removal of all the defects shall be verified by radiographic or other methods, as required.

10.4.1.8 Hard spot: Any hard spot having a minimum dimension greater than 2-inches in any direction and a hardness greater than 35 (HRC) BH shall be rejected. The section of the pipe containing the hard spot shall be removed as a cylinder.

10.4.1.9 Cracks and Leaks: The section of the pipe containing cracks or leaks shall be rejected. The section of the pipe shall be cut off within the limits of the requirements on length.

10.4.1.10 Workmanship and defects on the pipe related to dents, offset, plate edges, height of weld bead, height of flash of electric welded pipe, hard spots, cracks, sweats/leaks, lamination, arc burns and undercut inspection and repair of defects shall be in accordance with chapter 9 & chapter 10 of API 5L.

10.4.1.11 Imperfections of the types that exceed the specified criteria described in paras 9.10.1 to 9.10.7 of API Spec. 5L shall be considered as defects. Moreover, any imperfection having a depth greater than 8% of the specified wall thickness, measured from the surface of the pipe, shall be considered a defect.

10.4.1.12 Repair by weld of body pipe, plate and skelp is prohibited.

10.4.1.13 Repair by welding and weld seams without filler metal is prohibited.

10.4.1.14 Weld repair in each pipe length shall be limited to a maximum 5% weld seam length.

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10.4.1.15 Repair of weld seam pipe is not acceptable within 200mm of bevel ends, pipe section containing defect shall be cut-off and re-beveled in accordance with API 5L.

10.4.1.16 Weld repair shall not be carried out after cold expansion or hydrostatic testing of pipe. All welding and repair shall be executed using qualified low hydrogen procedures, which have been approved for the purpose by the purchaser and or its appointed third party inspector. 100% radiography/ultrasound of weld repairs shall be performed.

10.4.1.17 Only one repair attempt is permitted per defect.

10.4.1.18 All approved weld repair details shall be recorded and also soft copy shall be submitted.

10.5 **Flattening & Weld Ductility Tests**

At the option of the company (purchaser) the manufacturer shall take samples from the pipes manufactured in their premises for carrying out flattening and weld ductility tests in the factory in accordance with the requirements of API-5L. Manufacturers have to arrange and pay for the test from an independent laboratory.

10.6 The above test frequency for specimens shall be for the whole order and their cost should be included. This limit is exclusive of re-tests necessary due to failure of any specimen. (As applicable to API 5L)

10.7 Complete inspection criteria of steel line pipe shall be performed at Mill by Manufacturer as per API 5L table 17 for PSL 1 and table 18 for PSL 2 respectively.

11 COATING

Mill coating on the pipe surface is required on pipes of Dia. 4" and above sizes as per schedule of requirement. For coating refer spec. "SSGC's Technical Specification for 3 Layer PE Coating (COT-SPE-GE-0100)".

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12 MANDATORY REQUIREMENTS

12.1 The bidder shall submit the valid copy of following certificates;

- API 5L (Pipe Manufacturer's registration)
- API Specs Q1 / ISO 9001 (Quality Control and Management System)
- ISO 14001 (Environmental Management System)
- ISO 45001/18001(OSHAS)

12.2 Bids are invited directly from the Manufacturer or their authorized local agents in Pakistan. Beside local agent, principle involvement would be acceptable as regional Sales Representative, in case of foreign purchase. The Local pipe manufacturer may also participate directly in bidding process. However, in any case, Bids from stockiest and Brokers will be rejected.

12.3 The local agents/suppliers are required to submit valid authorization letter from the Manufacturer failing which will make bid non-compliant.

12.4 The bidder shall provide a clear and concise, clause by clause, compliance or exception (with detail) commentary to these technical specifications duly signed and stamped by Manufacturer which is mandatory for technical evaluation, failing to submit this document may be considered non responsive.

12.5 Offered Line pipe shall comply with the requirement of this specification. Quoted Line pipe which do not strictly comply with the requirements of this specification are liable for rejection.

13 SALES TRACK RECORD

13.1 The Bidder shall submit the supporting documents of sales track record for the offered Line Pipes including copies of purchase order & satisfactory performance certificate of operations issued by different client/end users related to Oil & Gas Sector with similar requirement along with their email (email address of end user's company domain and not the commercial domain like Yahoo, Gmail, or Hotmail, etc.), fax, telephone, address and name of persons to contact to whom they have supplied the offered Line pipes within the last five (05) years and have been successfully installed and operated.

13.2 Simply submitting a list of customers, to whom the Manufacturer has been supplying the Line pipes, will not meet the intent and purpose of this requirement. Failure to comply with this requirement may result in rejection of the bid.

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14 THIRD PARTY INSPECTION

14.1 In addition to the inspection and witnessing of mill tests to be done by the Manufacturer during the manufacturing and shipment of the Equipment / Material, SSGC may appoint a third party at its own cost for witnessing of the inspection and testing to be carried out at the manufacturer's facility under this specification. However, the purchaser (SSGC) reserves the right to witness any aspect of the manufacturing process / testing at no extra cost of atleast Two (02) Engineers. Vendor shall submit an inspection and testing procedure (ITP) for review and approval by the purchaser prior to the start of manufacturing

14.2 The manufacturer shall replace such defective and sub-standard pipes at its own risk & cost within the delivery period as specified in the contract.

14.3 The Inspector representing the purchaser shall have unrestricted access in the factory, during the period they are engaged on behalf of the purchaser.

14.4 The plant access, inspection, rejection, compliance etc. will be in accordance with API Specification 5L.

15 IN-HOUSE QUALITY CONTROL

15.1 The manufacturer shall provide documents for the in-house quality control program which shall strictly be adhered to in the production of all quoted manufactured products.

15.2 The program which must adhere to quality control standard registration API 5L from API, and ISO 9001 certificate from internationally recognized organization, also provide following details.

15.2.1 Weighting scale suitable for weighting pipes along with capacity, make and quantity.

15.2.2 Bevel gauges for measuring angles of bevel & pipe thickness gauges.

15.2.3 Number of personnel engaged on quality control giving their names, qualification and experience.

15.2.4 Vernier calipers, micrometer and other tools specification and quantity, make and capacity.

15.2.5 Equipment for carrying out mechanical tests.

15.2.6 Type, make & capacity of instruments and pressure gauges installed on hydrostatic testing equipment.

15.2.7 Type, make and capacity of NDT equipment.

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Note: Manufacturer shall submit documentary evidence of valid testing and calibration date of all machine equipment, instrument and gauges.

16 CERTIFICATES AND DOCUMENTS

16.1 The manufacturer shall furnish to purchasers the following information along with the certificate of compliance stating that the pipe delivered has been found to meet the tender specification requirement.

16.1.1 Specified diameter, wall thickness, grade, process of manufacture & type of heat treatment

16.1.2 Chemical analysis, (heat & product) showing weight percentage of all elements, carbon equivalent values, metallographic inspection report.

16.1.3 Yield strength, ultimate tensile strengths & elongating test data, fracture test report.

16.1.4 Minimum hydrostatic test pressure and duration.

16.1.5 Non-destructive inspection and test reports.

16.2 **Final Documentation**

16.2.1 A dossier shall be compiled concurrently with full record of the fabrication, materials, inspection and testing.

16.2.2 All items in the dossier shall be numbered and bound in an A4 four post binder; contents shall include but not be limited to the following (as applicable):

16.2.2.1 Front cover sheet detailing:

- P.O. No.
- Project Title
- Equipment Title
- Equipment Item No.

16.2.2.2 *Index*

16.2.2.3 *Purchaser Release Note*

16.2.2.4 *Purchase Order*

16.2.2.5 *A list of all applicable codes, standards and specifications*

16.2.2.6 *All drawings "As-built" - wherever legibility can be preserved, reduced to A3 and folded, where legibility cannot be preserved, drawings to be folded to A4 size and inserted into pre-punched plastic wallets.*

16.2.2.7 *NDT procedures*

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16.2.2.8 All NDT/PWHT/ Hydrostatic/ Performance test reports

16.2.2.9 Photocopy of Nameplate

16.2.2.10 Material chemical analysis and mechanical test certification

16.2.2.11 Final signed quality plan

16.2.2.12 Material test certificates

16.2.2.13 Mechanical design calculations

16.2.2.14 Procedure Qualification Records

16.2.2.15 Welding qualification Tests

16.2.2.16 Painting inspection certificates

16.2.2.17 Manufacturing Data Records (MDR)

16.2.2.18 Installation Drawings and Procedures

16.2.2.19 Operation and Maintenance Manual

16.2.2.20 Schedules of commissioning spare parts

16.2.2.21 Any other documents not specified above, but essential to make the Pressure safety valves operational and maintainable

16.2.3 For all above documents, six (06) sets shall be submitted in clearly labeled 4 ring white hard cover binders. All documents smaller and larger than A4 shall be inserted into A4 pre-punched, top-opening plastic wallets with the project document number/title block clearly visible to the front.

17 RESERVATIONS

17.1 The supplier shall give due and proper notice of commencements of offered items fabrication and test under these specifications to the Purchaser / Third party inspector appointed by SSGC.

17.2 The Purchaser reserves the right to delete, increase and/or decrease the quantities of the material at the time of placement of order.

17.3 The Purchaser reserves the right to increase, decrease and delete the quantity of all the items given herein the Schedule of Requirement.

18 LOCATION

The manufacturers shall be responsible to deliver and properly stack the pipe a purchaser's location, using its own manpower and machines.

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19 TRANSPORTATION

19.1 Handling loading and shipping procedures shall comply with the following API Recommended Practices for Transportation of Line Pipe:

- API RP 5L1 - Recommended Practices for Railroad Transportation of Line Pipe
- API RP 5L5 - Recommended Practices for Marine Transportation of Line Pipe

19.2 Packing method and materials shall adequately protect the pipe and coating, if any, from damage during packing and transport. Recessed steel end protectors shall be fitted to each end of all the pipes to facilitate handling by hooks.

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SSGC PLANNING & DEVELOPMENT DEPARTMENT	SUI SOUTHERN GAS COMPANY LIMITED	APPENDIX-A
	INSPECTION CHECK LIST FOR BARE LINEPIPE	
	TENDER ENQUIRY NO. _____	

➢ INSPECTION CHECK LIST (AS PER TABLE-18 OF API 5L 46TH EDITION)

S.No.	Description	Inspection Scope	Inspection Frequency	Acceptance Criteria As per Table-18 (API 5L)
1	Forming and Welding	OD of Pipe Welding Speed, welding current and voltage	Twice per shift	Approved by the Inspector of owner.
2	On-line Ultrasonic Test	Pipe body lamination. Spiral weld. Longitudinal Weld.	100% 100% 100%	API 5L
3	Visual Inspection	Dents offset of palte edges, height of weld seam, lamination undercuts, cracks , sweats and leaks.	All Pipes	API 5L
4	Manual UT (Can Replace by X-ray)	Imperfection marked by auto UT Skelp end weld.	100%	API 5L
5	X-Ray (2% sensitivity)	Joint of Skelpt and weld and spiral weld Minimum 8" distance from each end.	100% 100%	API 5L
6	Hydrostatic Test	Without Leakage Pipe body or weld seam	Once per heat 100%	Without Leakage As per API 5L Clause 9.4 & 10.2.6
7	NDT (X-Ray or UT)	Weld Seam	100%	API 5L
8	Final Inspection	OD (Pipe body & end) Thickness Straightness Out of roundness Pipe end level Length Weight Visual Inspection	All Pipes All Pipes All Pipes All Pipes All Pipes All Pipes All Pipes All Pipes	API 5L

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PLANNING & DEVELOPMENT DEPARTMENT

SUI SOUTHERN GAS COMPANY LIMITED

INSPECTION CHECK LIST FOR BARE LINEPIPE

TENDER ENQUIRY NO. _____

APPENDIX-A

S.No.	Description	Inspection Scope	Inspection Frequency	Remarks
1	On-Line UT	Inspection record Calibration	Once per shift 100%	
2	Hydrostatic Test	Inspection record Pressure gauge calibration	100% 100%	
3	Repair for weld	Electrode heating record Record of repair for weld	Once per shift Once per shift	
4	i-Pipe Burst test ii-Drop Weight Tear Test	As per specification As per specification	One specimen One specimen	
5	Final Inspection	Final inspection record Measure out of roundness / Hi-Low Pipe Dimension	Once per shift 100% 100% 100%	
6	Dispatch Inspection	Pipe Marking Pipe Storage Pipe Certificates Pipe release note Witness X-Ray inspection Review all inspection record Visual Inspection	Once per shift Once per shift 100% 100% 100% 100% All Pipes	

Note: All Test and Inspection report must be submitted by manufacturer in English language.

SUI SOUTHERN GAS COMPANY LIMITED SSGC

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QUALITY INSPECTION AND TEST PLAN (LINE PIPE)

S.No	Activity	Frequency	Acceptance Criteria (As per SSGC specifications & API 5L)	INSPECTED BY		
				Manuf	Contractor/TPI	Client/Customer
1	Receipt of Raw Materials	Each Coil/Batch		H	W	R
2	Traceability Marking	All pipes & Raw Material		H	W	R
3	Feeding of Coils, De-coiling straightening , Edge Preparation, Forming of Pipe, I/S & O/S SAW	All pipes		H	W	R
4	On-line Ultrasonic Testing (Welding / Pipe Body)	All pipes		H	W	R
5	Pipe Cutting	All pipes		H	W	R
6	Slag Removal	All pipes		H	W	R
7	Chemical Testing	Each Heat		H	W	R
8	Mechanical Testing	Table 18 & 20 of API 5L		H	W	R
9	Transverse Tensile Testing	Table 18 & 20 of API 5L		H	W	R
10	Strain Aging	As per SSGC Specification **LPI-SPE-GE-0001**		H	W	R
11	Weld Tensile Test	Table 18 & 20 of API 5L		-	-	-

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12	Guided Bend Test	As per SSGC Specification **LPI-SPE-GE-0001**		H	W	R
13	CVN Impact Test	As per SSGC Specification **LPI-SPE-GE-0001**		H	W	R
14	Drop Weight Tear Test	One from each heat		H	W	R
15	Visual Inspection	All pipes		H	W	R
16	Diameter at Pipe End	All pipes		H	W	R
17	Diameter at Pipe Body	All pipes		H	W	R
18	Out of Roundness	All pipes		H	W	R
19	Wall Thickness of Coil	All pipes		H	W	R
20	Straightness	All pipes		H	W	R
21	Radial Offset	As per SSGC Specification **LPI-SPE-GE-0001**		-	-	R
22	Bulges, Dents & Flat Areas	All pipes		H	W	R
23	Length	All pipes		H	W	R
24	Skelp End Weld	Skelp Pipe		H	W	R
25	Cross-Weld Repair	Skelp Pipe		H	W	R
26	Fluoroscopy Inspection	All start stop, skelp end & UT marked pipes		H	W	R

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27	Manual Weld Repair	Defective Pipe		H	W	R
28	Repair of Surface Defects	Defective Pipe		H	W	R
29	End Facing	All pipes		H	W	R
30	Bevel Angle	As per SSGC Specification **LPI-SPE-GE-0001**		H	W	R
31	Root Face	As per SSGC Specification **LPI-SPE-GE-0001**		H	W	R
32	Square-ness	As per SSGC Specification **LPI-SPE-GE-0001**		H	W	R
33	Hydrostatic Testing	All pipes		-	-	R
34	Burst Testing	One from each heat		-	-	R
35	End X-ray Inspection	All pipes		H	W	R
36	Final Inspection	All pipes		H	H	R
37	Weighing of Pipe	All pipes		H	W	R
38	Marking	All pipes		H	W	R

Note:

- All QITPs shall be in accordance with SSGC Technical Specification i.e. Line Pipe **LPI-SPE-GE-0001**
- All tests mentioned in the S.O.R shall be conducted and the responsibility will be borne by the manufacturer.
- In the event of any discrepancy, the specification shall supersede all other documents.

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SUI SOUTHERN GAS COMPANY LIMITED (SSGC)

TECHNICAL SPECIFICATION FOR 3 LAYER PE COATING

RECEIVED
07 DEC 2023
ASGM (T) Office-KT

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18 DEC 2023
GM HSE & QA

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1 GENERAL

1.1 Scope

The purpose of this specification is to describe the minimum functional and technical requirements for 3 Layer-PE coating application on Bare steel Line pipe at mill for buried pipeline.

1.2 Definitions

Purchaser means OWNER and CONTRACTOR means SUPPLIER/MANUFACTURER. This definition shall apply throughout this specification.

1.3 Errors or Omissions

Any errors or omissions noted by the Contractor in this Specification shall be immediately brought (during pre-bid queries at the time of tender process) to the attention of the Owner.

1.4 Deviations

All deviations to this specification shall be brought to the knowledge of the Owner in the bid and all deviations shall be shown in the documentation prepared by the Contractor.

1.5 Conflicting Requirements

1.5.1 In the event of conflict, inconsistency or ambiguity between the contract's scope of work, this Specification, National Codes & Standards referenced in this Specification, the Contractor shall refer to the Owner whose decision shall prevail.

1.5.2 Some requirements in this specification may be modified by specific requirements in the Schedule of Requirements. In case of conflict, the specific requirements supersede this specification.

1.6 Reporting Procedure

1.6.1 A reporting and documentation system shall be agreed between the Owner and the Contractor for the status of coating process, inspection, testing and shipment of the equipment/material to be supplied under this specification.

1.6.2 Manufacturer shall provide reports and summaries for performance and testing operations (after final TPI Inspection) in conformance with a manufacturing schedule approved by Owner.

1.6.3 Daily, weekly and monthly run summaries of all major aspects of the processes shall be provided as reports to the Owner.

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2 ABBREVIATIONS/SYMBOLS

For the purpose of this document, the words and expressions listed below shall have the meanings assigned to them as follows:

ABBREVIATION	NAME
ANSI	American National Standard Institute
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society of Testing and Materials
AWS	American Welding Society
°C	Celsius (Degree)
CA	Corrosion Allowance
CD Test	Cathodic Disbondment Test
CS	Carbon Steel
D	Diameter
DIN	Deutsches Institut für Normung", meaning "German Institute for standardisation".
DWT	Drop Weight Tear Test
EMS	Environment Management System
EN	European Standard
ERW	Electric Resistance Welded
°F	Fahrenheit (Degree)
FBE Coating	Fusion bonded epoxy coating
Gr.	Grade

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ABBREVIATION	NAME
HFW	High Frequency Welded
ISO	International Organization for Standardization
ITP	Inspection & Testing Plan
Lbs.	Pound
Lb.ft	Pound-Foot
MFR	Melt/Mass flow rate
mm	Millimeter
MPS	Manufacturer Procedure Specification
NDT	Non-Destructive Testing
Ni	Nickel
NPT	National Pipe Thread Tapered
OD	Outside Diameter
OHSAS	Occupational Health and Safety Assessment Series
PE Coating	Polyethylene Coating
PQT	Procedure Qualification Test
PSL	Product Specification Level
R	Radius
Sa	Surface Abrasive
SAW	Submerged Arc Welding
Sch	Schedule
SMLS	Seamless

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ABBREVIATION	NAME
SMYS	Specified Minimum Yield Strength
SOR	Schedule of Requirement
SS	Stainless Steel
STD	Standard
TPI	Third Party Inspector
UV	Ultra Violet
UT	Ultrasonic Testing

3 CODES, REGULATIONS AND STANDARDS

3.1 Manufacturer shall meet or exceed the requirements of the latest edition of the following applicable codes, regulations and standards, except as superseded herein.

- ASME B31.8, Gas Transmission and Distribution Piping Systems
- ASME B31.3, Process Piping
- API 1104, Standard for Welding Pipelines and Related Facilities
- ASME Section V, Non-Destructive Examination
- API 5L, Specification for seamless and welded steel pipe
- API RP5L1, Recommended Practice for Railroad Transportation of Line Pipe
- API RP 5LW, Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels
- API RP 5L9: External Fusion Bounded Epoxy Coatings of Line Pipe
- ASTM 06.02: Paint Products and Applications; Protective Coatings; Pipeline Coatings
- ASTM G8: Standard Test Methods for Cathodic Disbonding of Pipeline Coatings
- ASTM G14: Standard Test Method for Impact Resistance of Pipeline Coatings (Falling Weight Test)

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- ASTM G17: Standard Test Method for Penetration Resistance of Pipeline Coatings (Blunt Rod)
- ASTM G42:Standard Test Method for Cathodic Stripping of Pipeline Coatings at High Temperatures
- DNV RP-F102: Pipeline Field Joint Coating and field repair of line pipe coating.
- DNV RP-F106: Factory Applied External Pipeline Coatings for Corrosion Control
- DIN 30670, Polyethylene coatings on steel pipes and fittings – Requirements and testing
- EN ISO 21809-1, Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems — Part 1: Polyolefin coatings (3-layer PE and 3-layer PP)
- ASTM D1505, Standard Test Method for Density of Plastics by the Density- Gradient Technique
- DIN 50049, Inspection Documents for the Delivery of Metallic Products
- ISO 8501 – 01, Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings.
- ISO (8502 – 6/9), Preparation of steel substrates before application of paints and related products - tests for the assessment of surface cleanliness. Extraction of soluble contaminants for analysis.

4 SCOPE OF SUPPLY

The supplier shall guarantee that the design, engineering and specifications of the extruded polyethylene coating shall be in strict compliance and conformity with this specification including DIN 30670 latest editions.

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5 REFERENCES AS APPLICABLE SPECIFICATION

5.1 International Standard

- German Standards Institute, DIN 30670.
- EN ISO 21809-1 for Factory/Plant applied coating as a minimum.

5.2 The above standard defines the requirement and test methods relating to polyethylene sheathing applied at manufacturer's works, extruded, molten on and homogeneous to steel pipes for buried installation. Its purpose is to provide quality assurance of the sheathing.

5.3 Specifications and requirements given in this document for specification of Extruded Extended Polyethylene coating of line pipe.

6 SPECIFICATIONS FOR 3 LPE COATING

6.1 Coating Material

6.1.1 Bidder/Manufacturer shall submit the purchase sources of coating raw material including their technical data sheet and test certificates (Third Party Lab) for epoxy resin, Adhesion & Polyethylene.

6.1.2 High density polyethylene for operating temperature up to 80°C.

6.2 Coating Thickness

6.2.1 Depending on the nominal size as per SOR, there are different values for the total coating thickness as below.

Nominal Size	Minimum coating thickness
(mm)	(mm)
≤ DN 100	2.5
> DN 100 ≤ DN 250	2.7
> DN 250 < DN 500	2.9
≥ DN 500 < DN 800	3.2
≥ DN 800	3.7

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6.2.2 The exterior pipe coating applied by extrusion coating process shall be a (3) layer system comprising of the following:

6.2.2.1 Thermosetting, fusion bonded epoxy primer of minimum 300 microns (0.300 mm) thickness.

6.2.2.2 An adhesive layer of a copolymer of 300 to 450 microns (0.300 to 0.450 mm) compatible for polyethylene coating.

6.2.2.3 Outer layer of fully stabilized polyethylene of high density for sheathing in accordance with standard DIN 30670.

6.2.2.4 The polyethylene resin used shall be virgin and un-recycled and density range shall be from 0.94 to 0.951 grams/cubic centimeter in un-colored and unfilled condition.

6.2.2.5 With color and filling it shall be equal to or greater than 0.95 gram/cubic centimeter to ASTM D1505.

6.3 Application of 3 Layer PE Coating Process (Type-S)

The coating application shall be through a continuous extrusion process to give a homogenous sheathing with following requirements as a minimum.

6.3.1 Surface Preparation

6.3.1.1 Prior to grit blast cleaning, the pipes shall be dried.

6.3.1.2 The entire external surface of the pipe shall be grit blast cleaned to the standard degree of cleanness from Sa2-1/2 to Sa 3.0 in accordance to ISO 8501-01 (S.I.S. 05.59.00)/ISO (8502-6/9).

6.3.1.3 All pipes surface conditioning shall be carried out as specified minimum and the bidder shall provide details of standard of cleanness that will be applied and shall provide a copy of the Standards.

6.3.1.4 Following blast cleaning and prior to external coating application, the external surface of the pipe shall be inspected for steel defects and quality of blast finish. Any pipe with dents, gouges major laminations or other defects will be rejected. Surface profile shall range from 50 to 80 micron or as advised by FBE primer manufacturer for 300 microns FBE application.

6.3.1.5 All pipes shall be coated in any case, (within 4 hours) of Blast cleaning and before the formation of visible rust.

6.3.1.6 Before application of epoxy primer, the surface to be coated shall be heated to a temperature suitable for the process and spray washed with solution of Oakite 33 (phosphoric acid) or to be specified by the bidder and spray rinsed with clean hot water at a suitable temperature to remove all acids. Coating applicator shall be

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responsible for complying with local and international HSE regulations for using the chemical treatment materials including disposal of the used chemicals.

6.3.1.7 As the surface pre-treatment is a part of PQT & production and also used prior to application of 3 layer PE coating according to International Standard DIN 30670 and EN ISO 21809-1 clause #10.1.4 (8501-01) and (8502-6/9). The blast cleaned pipe surfaces shall be pre-treated with phosphoric acid in accordance with manufacturer specification.

6.3.1.8 Preheating of pipe (required prior to application of primer, adhesive and polyethylene) and immediate cooling (with water after polyethylene application) shall be in accordance with the manufacture requirement. Bidder to specify the preheating and cooling temperatures applicable to the manufacturing of the product quoted.

6.3.1.9 The manufacturer of coating while selecting primer shall also ensure high resistance against diffusion and disbonding between steel primer and adhesive even under extreme conditions of elevated gas operating temperature and high cathodic protection status to meet the tender specifications.

6.3.1.10 The fusion bond powder epoxy primer shall be applied by the electrostatic/airless spray method.

6.3.1.11 Immediately, following the primer application the final layers of adhesive and polyethylene shall be applied.

6.3.1.12 Bidder shall submit along with the bid, original printed detailed technical specifications, the process of manufacturing, details of cleaning of pipe, type and model and manufacturer's name of primer, adhesive and polyethylene and their storage conditions prior to application and thicknesses of primer, adhesive and polyethylene and coating application details. Name of the product with the manufacturer's name for the offered materials are to be clearly specified and referenced/ endorsed in the original printed technical literature submitted with the bid.

6.4 Coating Property

6.4.1 Bidder shall provide with the bid a list of the following properties of the offered coating for comparison to the latest edition of DIN Standard 30670 but not limited to:

6.4.1.1 Peeling Resistance (Bond Strength)

At (20±5) °C (Min 150 N/CM); At (50±5) °C (Min 100 N/CM); At 70°C (Min 60 N/CM); At 80°C (Min 20 N/CM); Peeling Resistance value __N/CM after hot water immersion test as per DIN 30670 & EN ISO 21809-1 Standards.

6.4.1.2 Resistance to Impact

- Resistance to impact shall be in accordance with code DIN 30670.

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6.4.1.3 Resistance to Indentation

- 2.5 Kg weight/24 hrs./70°C with 1.8 mm penetration probe;

  (Test Method DIN 30670) - Value 0.004 inch (Max.)

6.4.1.4 Coating Resistance

Coating resistance shall conform to standard DIN 30670. Bidder shall submit along with the bid, the electrical coating resistance for the temperatures mentioned below:

- (≥ 10^8) OHM m^2 at 23°C

6.4.1.5 Heat Aging

- The heat aging resistance shall be according to DIN 30670.

6.4.1.6 UV-Resistance

- The UV-resistance shall be as per DIN 30670.

6.4.1.7 Cathodic Disbonding

Cathodic disbonding shall conform to standard DIN 30670.

- ASTM G8, 30 DAYS/23°C - not greater than 10 mm
- ASTM G8, 30 DAYS/50°C - not greater than 15 mm
- ASTM G42, 30 DAYS/60°C - not greater than 15 mm
- ASTM G42, 30 DAYS/80°C - not greater than 15 mm

6.4.1.8 Elongation (Test Method ASTM 638)

- Value = 600% (Minimum)

6.4.1.9 Bidder shall confirm that the above properties provided in the bid are for the high density polyethylene coating for operating temperatures up to 80 °C and coating thickness as per Table in section 6.2.

6.4.1.10 Elongation test method shall conform to standard DIN 30670.

6.5 Physical and Chemical Properties

6.5.1 The coating bonding should prevent relative displacement between coating and pipe surface and allow sound field joint coating. Mechanical resistance of coating should be sufficient to prevent physical damage to the coating during shipment, storage and laying. Excellent aging resistance against thermal oxidation and weathering to preclude coating embitterment during storage, pipe laying and service.

6.5.2 The coating at the pipe extremities with 150 mm±15mm cut back length shall meet the

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requirement of bevel angle of not more than 20 degree for the coating applied and on the cut back length for 20 mm length on the bare pipe portion beyond coating edge FBE shall be applied.

6.5.3 The coating shall meet the contract specifications for the following properties not limited to DIN 30670 and shall conform to the requirements of standard DIN 30670 (latest edition) as a minimum unless otherwise specified.

6.5.3.1 Resistance to indentation

6.5.3.2 Aging under exposure to light

6.5.3.3 Freedom from porosity

6.5.3.4 Elongation due to tearing

6.5.3.5 Resistance to impact

6.5.3.6 Resistance to peeling (stripping)

6.5.3.7 Specific sheathing resistance

6.5.3.8 Thermal aging

6.5.3.9 Cathodic disbonding

6.5.4 Requirement relating to the surface of the steel pipe, such as degree of cleanliness of the pipe surface and pickling to be carried out in accordance with the stipulations in DIN 30670.

6.5.5 Requirement relating to sheathing, i.e. minimum localized coating thickness, freedom from porosity, resistance to peeling (bond strength) etc. should meet the minimum requirements of related sections of standard DIN 30670 and the contract specifications.

7 INSPECTION AND TESTING

7.1 General

The tests shall be carried out by the manufacturer and be generally accepted and recognized by material testing institutions. The compliance with the requirement relating to the pre-treatment of the pipe, in accordance with Section 4.1 and to the minimum coating thickness in accordance with Section 4.2.1 and to the freedom from porosity in accordance with Section 4.2.2 and to the resistance to peeling (Bond strength) in accordance with Section 4.2.3 of DIN 30670, Edition 1991 or the respective sections of latest edition. The compliance with the requirements in accordance with Section 4.2.4 to 4.2.9 of DIN 30670, shall be demonstrated by the manufacturer by means of a single test for each composition of the plastic material.

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7.2 **Testing of the Coating Thickness**

For this purpose, at-least 10 (ten) measurements shall be made at locations uniformly distributed over the length and periphery of the pipe. The coating thickness shall be measured with the aid of non-destructive operating instrument.

7.3 **Holiday Detection Test**

7.3.1 Holiday Detection test shall be as per Annex B of ISO 21809-1:2011 or the respective section of the latest edition.

7.3.2 The test shall consist of detecting any porosity of the coating using a scanning electrode energized by high-arc-voltage. Defects shall be detected by a spark occurring between the steel and the electrode at the defect accompanied by a sound and/or light signal,

7.3.3 The voltage shall be set at 10 kV/mm based on the minimum total coating thickness. The voltage shall not exceed 25 kV.

7.4 **Test Certificate**

7.4.1 Test/inspection certificates to be provided by the manufacturers; however, the Purchaser or its representative shall have the right to inspect and/or to test and check the goods to confirm their conformity to the specification.

7.4.2 Inspection Certificate by Inspector shall conform to Standard DIN 50049 (latest edition), and shall be in English Units. The inspection certificates to be submitted to the Purchaser shall state that the pipes have been coated in accordance with DIN Standard 30670 (latest edition) as a minimum and in conformity with the specifications at temperatures specified in DIN 30670 and the operating temperature 80°C. Each such certificate shall show the contract number, the number and dimension of pipe coated, the date to which tests and inspections were performed and the name and signature of person(s) responsible for such tests. Six copies of each such certificate shall be submitted.

7.4.3 The inspection and tests may also be conducted by the Purchaser or its representatives on the premises of the Supplier. All reasonable facilities and assistance including access to raw material used, its specification and test certificates (original/copies), drawings and production data shall be furnished to Purchaser or its representative at no charge to the Purchaser. Relevant clauses of General Term & Condition and Special Terms & Conditions of the tender requirements are also to be referred.

7.4.4 Any inspected or tested pipe lengths fail to conform to the specification, the Purchaser may reject them and the Supplier shall repair or re-coat these pipe lengths at no charge to the Purchaser.

7.4.5 Nothing in this clause shall in any way release the Supplier from any guarantee or other

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responsibilities and obligations in this respect.

8 RECOMMENDATION FROM SUPPLIER/BIDDER

8.1 **Coating Material Required for Repair or Injurious Damages & Repairing Process**
The Supplier/Bidder shall provide recommendation with respect to coating material required for repair of injurious damages, with detailed process of repairing.

8.2 **For Compatible Joint Coating Material**
The Supplier/Bidder shall provide recommendations, specifying the compatible joint coating material required to be utilized for joints coating purposes and requirement such material for each girth weld, including losses.

8.3 **For Handling, Storage & Stacking of Pre-coated Line pipe**
The Bidder/Supplier shall provide their recommendations for handling, storage and stacking of coated line pipe in uncovered yard to avoid possible damage to the coating at ambient temperature up to 50°C.

8.4 **For Field Bending of Pre-coated Line pipe**
The Bidder/Supplier shall provide their recommendations for field bending of coated line pipe during pipeline construction.

8.5. **For Field Hydrostatic Testing of Coated Pipe**
The bidder/supplier shall provide their recommendations on field hydrostatic yield testing of the coated pipe to test pressures corresponding to 100 to 105 percent (design as per pressure class rating 150#, 300#, 600# & 900# according to Pipe size mention in SIOR) of SMYS of pipe material. The Bidder/supplier shall ensure and confirm that coating of the pipe shall have no impact on all properties of coating after aforesaid field testing.

9 MARKING

9.1 For marking of the coated line pipe on the outside/inside surface of each length of pipe shall be as follows:

9.1.1 These shall be paint stenciled in specific colors in clear bold lettering of 1" on outer surface of each pipe in the English language. The difference in wall thickness shall be indicated in colored ring on one end of the pipe.

- Pipe Manufacturer's name
- API Monogram

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- Type of Steel (Carbon Steel)
- Process of Manufacturer of Pipe & Coating
- Order No.

9.1.2 Pipe Serial No. and Heat No of each coated pipe: This is to be serially numbered on outside surface and the number shall appear on the inside surface at one end. The serial No. of pipe should start from 10,001.

9.1.3 Size of Diameter: This shall be stenciled inside/outside surface of the each pipe.

9.1.4 Wall Thickness: This shall be stenciled on the inside surface of each pipe at one ends and outside surface.

9.1.5 Material Grade: This shall be stenciled on the inside surface of each pipe at one end and outside surface.

9.1.6 Length of Pipe: The exact length of each pipe is to be stenciled on the inside surface of one ends and outside surface.

10 TEMPORARY MILL COATING OF UNCOATED PORTION OF LINEPIPE

Temporary coating of the uncoated pipe ends shall be done with a clear varnish and easy to surface cleaning in field during pipe construction for weld joint coating.

11 BEVEL GUARDS/END CAPS .

Bevel guard provided by the bare line pipe manufacturer should be removed and stored properly before application of 3LPE coating and then furnish these bevel guards to protect bevel ends of pipes after application and also supplier shall ensure for arrangement of strengthen end cap fixing at both end of pipe at mill prior to Ex-works deliver to make sure the line pipe safety during long storage in an open environment during shipment or storage at Buyer's locations. Also the end cap details shall be provided with bid.

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12 HANDLING, TRANSPORTATION IN COUNTRY OF ORIGIN, LOADING, LASHING AND SHIPMENT ETC

12.1 The Supplier shall be responsible for and shall provide as part of the work, all services and functions for coating of line pipe and related to coated line pipe handling, loading, unloading, lashing and securing in ship's holds charges and expenses related thereto shall be included in the bid price.

12.2 The Supplier shall exercise all due care and diligence in ensuring that the coated line pipe is transported from its premises to the port of loading and is loaded in the ship's holds in a manner so as to avoid all possible damage to the line pipe and to the coating on the line pipe.

12.3 The Supplier shall further ensure that rail/road transportation to the port of loading and loading in ship's holds conform strictly to standard laid down in API RP 5L1 and API 5L5, respectively.

12.4 The Supplier shall be responsible for all damages/losses to the line pipe and to the coating on the line pipe during road/rail and marine transportation and or loading on ship's holds and shall pay the Purchaser all direct costs which may be incurred, including correction or removal or replacement of the line pipe or to the coating and including compensation for related professional services.

13 MANDATORY REQUIREMENTS

13.1 Bidder shall submit a valid API accreditation certificate with the bid and confirming that it is active on API website.

13.2 The bidder shall submit the valid copy of following certificates;

- API 5L (Pipe Manufacturer's registration)
- API Specs Q1 / API ISO 9001
- ISO 14001 (Environmental Management System)
- ISO 45001/18001(OSHAS)

All the above certificates shall cover the scope of 3 Layer PE external coatings application on steel line pipe.

13.3 API monogram has to be affix/stenciled on each length of pipe consignment.

13.4 The manufacturer shall provide documentation with the bidding documents for the in-house quality control programme which is strictly adhered to the production of all quoted manufactured products. This programme must adhere to manufacturer's

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registration with ISO 9001. Offers not conforming to this requirement will be rejected.

14 SALES TRACK RECORDS & PERFORMANCE CERTIFICATE

14.1 The Bidder shall submit the supporting documents of sales track record for the offered coating including copies of purchase order/satisfactory certificate of five (5) different end users related to Oil & Gas Sector with similar requirement along with their email (email address of end user's company domain and not the commercial domain like Yahoo, Gmail, or Hotmail, etc.), fax, telephone, address and name of persons to contact to whom they have supplied the offered coating within the last five (05) years and have been successfully operated.

14.2 Simply submitting a list of customers, to whom the manufacturer has been supplying the coating, will not meet the intent and purpose of this requirement. Failure to comply with this requirement may result in rejection of the bid.

15 OTHER INFORMATION REQUIRED

15.1 The bidder is required to essentially provide in the bid the following information:

15.1.1 The size and delivery schedule of other confirmed orders (both in terms of diameter, wall thickness and meters) during the delivery schedule period of this tender and does not overlap with delivery schedule of SSGC.

15.1.2 Potential unconfirmed orders.

16 FINAL DOCUMENTS SUBMISSION

16.1 Bidder/Manufacturer shall submit following detail documents during/after production:

16.1.1 Daily/Weekly/Monthly Progress reports after TPI certification.

16.1.2 Bidder/Manufacturer shall submit following detail documents; SSGC will review/approve and nominate TPI accordingly.

- Manufacturer's Quality Inspection and Testing Plan (QITP).
- Manufacturer's Procedure Specification (MPS).
- Inspection Testing Plan (ITP).

Further, approved MPS & ITB will submit prior to start of production of pipe for SSGC's review and approval.

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16.1.3 During Manufacturing and testing process, those defective coated pipes which failed to comply and are not acceptable as per standard DIN 30670 in all aspect. Vendor shall share the list of those pipes No./Heat No. after inspection of Third Party Inspector.

16.1.4 MTC: The Supplier shall submit six copies of inspection and MTC to the Purchaser after placement of order and before coating process. The Purchaser has right to reject the consignment if bidder has failed to provide MTC.

16.1.5 Bidder shall submit manufacturing conformance certificate along with consignment.

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SSGC PLANNING & DEVELOPMENT DEPARTMENT	SUI SOUTHERN GAS COMPANY LIMITED INSPECTION CHECK LIST FOR 3LPE COATING TENDER ENQUIRY NO. _____	APPENDIX-B

➢ INSPECTION CHECK LIST (3LPE COATING)

Inspection and Tests to be carried out for procedure Qualification of Linepipe Coating for each pipe diameter.

S.No.	Description	Acceptance Criteria	
		Accepted Value	No. of Test
1	**BEFORE CLEANING**		
	Oil Contamination	No indication of oil contamination	10
2	**AFTER CLEANING**		
	Cleanliness	Sa - 2 1/2 to Sa - 3.0 in accordance ISO 8501-01 (S.I.S 05.59.00)	10
	Profile		10
3	**COATING THICKNESS**		
	FBE	300 micron - 450 micron	24 (12 x 2 pipes)
	FBE + Adhesive + PE	Minimum 2.5 mm at Spiral / Longituditional weld seam	24 (12 x 2 pipes)
4	**HOLIDAY**		
	FBE	Smooth with no surface defects	2
	FBE + Adhesive + PE	Smooth with no surface defects	10
5	**ADHESION / PEEL STRENGTH**		
	FBE	As per manufacturer's recommendation	2
	FBE + Adhesive + PE	Zone A of Fig 1 DIN 30670 or as recommendation by manufacturer	5 (Random)
6	PENETRATION (IDENTATION)		

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SSGC PLANNING & DEVELOPMENT DEPARTMENT	SUI SOUTHERN GAS COMPANY LIMITED INSPECTION CHECK LIST FOR 3LPE COATING TENDER ENQUIRY NO. _____	APPENDIX-B

	2.5 Kg weight / 24 hrs. with 1.8 mm penetration probe	0.004"(max.) at 70°C	10 (2 x 5 pipes)
	FBE + Adhesive + PE	Original value	2
7	**FLEXIBILITY BEND TEST**		
	FBE	No Cracking / Disbondment pinholes	2
8	**CATHODIC DISBONDING**		
	30 days/ 23 °C ASTM G8	Not greater than 10 mm	
	30 days/ 50 °C ASTM G8	Not greater than 15 mm	
	30 days/ 60 °C ASTM G42	Not greater than 15 mm	
	30 days/ 80 °C ASTM G42	Not greater than 15 mm	
9	**ELONGATION**		
	(Test method) ASTM 638	Minimum 600%	
Note: All Test and Inspection report must be submitted by manufacturer in English language.			

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SECTION-5

SUI SOUTHERN GAS COMPANY LIMITED

UNDERTAKING OF COMPLIANCE WITH INTEGRATED MANAGEMENT SYSTEM (IMS) MANUAL AND BLACKLISTING MECHANISM

I, _____ [Supplier's Authorized Representative Full Name], of _____ [Supplier Company Name], with principal office located at _____ [Full Address], do hereby solemnly affirm and declare as follows:

1. That I am the duly authorized representative of _____ [Supplier Company Name], and have the legal authority to make this declaration on behalf of the company.
2. That I confirm having accessed, read, and fully understood the **Integrated Management System (IMS) Manual** provided by **Sui Southern Gas Company Limited (SSGC)**, available at the official website: https://www.ssgc.com.pk/web/wp-content/uploads/2025/06/IMS-Mannual-1-1.pdf
3. That _____ [Supplier Company Name] agrees to comply fully with all the policies, procedures, and responsibilities outlined in the IMS Manual, and will ensure that all relevant employees, contractors, and agents are made aware of and comply with the same.
4. That _____ [Supplier Company Name] acknowledges that failure to comply with the IMS Manual may result in corrective action, including but not limited to financial penalties as per SSGC policy and suspension or termination of business with Sui Southern Gas Company Limited (SSGC).
5. That the bidder has also read, understood, and accepted the **Blacklisting Mechanism of Sui Southern Gas Company Limited (SSGC)**, available at: https://www.ssgc.com.pk/web/wp-content/uploads/2024/09/blacklisting_mechanism_2024.pdf
6. Any type of violation of the tender terms and non-performance will result in the enforcement of the Blacklisting Mechanism, which will be dealt with in accordance with the Blacklisting Rules/Mechanism.
7. This affidavit is made in good faith and for the purpose of affirming our commitment to health, safety, environmental standards, and compliance with the **Integrated Management System (IMS) Manual** and the **Blacklisting Mechanism** of Sui Southern Gas Company Limited (SSGC), as well as all other applicable policies and procedures of SSGC.

Signed at _____ [City] on this _____ day of _____, *20* .

Signature: _____
Name: _____
Designation: _____
Company Name: _____
Contact Details: _____

(Company Stamp / Seal Mandatory)

Witnessed by:

Signature of Witness: _____
Name of Witness: _____
Date: _____

Signature of Witness: _____
Name of Witness: _____
Date: _____

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

SUI SOUTHERN GAS COMPANY LIMITED

UNDERTAKING OF ELIGIBILITY, LEGAL CAPACITY, NON-BANKRUPTCY, NON-CONVICTION, NON-BLACKLISTING, AND NO CONFLICT OF INTEREST FOR PROCUREMENT PARTICIPATION

I, _____ [Authorized Representative's Full Name], holding CNIC No. _____, duly authorized vide Board Resolution / Power of Attorney dated _____ (copy attached), on behalf of _____ [Bidder's Company Name], having its principal office at _____ [Full Address] (the "Bidder"), do hereby solemnly affirm and declare that:

The Bidder hereby declares and undertakes that it:

(a) possesses the technical competence, financial resources, equipment and other physical facilities, personnel, managerial capability, experience and past performance necessary to complete the procurement contract;

(b) has the legal capacity to enter into a procurement contract;

(c) has not been declared bankrupt or, in the case of a company or firm, insolvent or being wound up, and its activities or affairs are not suspended by a Competent Authority or by a Court of Law;

(d) is not under any legal proceedings which may result in bankruptcy or any other situation entailing the total or partial loss of the right to administer and dispose of its property;

(e) confirms that, at the time of submission of the bid:

  (i) it is not blacklisted by SSGC or cross-debarred by the Authority, and is not debarred from any procurement process in Pakistan; and

  (ii) in the case of a company, none of its owners, beneficial owners, directors or officers is debarred from any procurement process in Pakistan;

(f) is not blacklisted or debarred at the time of submission of the bid by an international financial institution, international organization, foreign country, or other multilateral development bank for the period defined by them;

(g) has not been convicted by a final judgment of a Court of Law;

(h) has not been convicted, and, in the case of a company, none of its owners, beneficial owners, directors or officers has been convicted, of a criminal offence related to—

  (i) its professional conduct; or

  (ii) prohibited practices within the period specified in the tender documents; and

(i) has no conflict of interest in this procurement and, to the best of its knowledge, neither it nor its owners, beneficial owners, directors or officers has any interest in or relationship with any SSGC director, officer or employee involved in this procurement, nor does any such person or his or her spouse, parent, child or sibling hold any interest in the Bidder; it shall disclose any conflict arising before award.

I hereby affirm that the above declarations are true and correct and that this Undertaking forms part of the Bidder's bid, and acknowledge that any false declaration, misrepresentation or non-disclosure shall entitle SSGC, at any stage including after award, to disqualify the Bidder, forfeit the bid security / performance guarantee, terminate any contract awarded, and initiate blacklisting proceedings under the PP Rules, in addition to any other remedy available under the tender conditions and applicable law.

Signed at _____ [City] on this _____ day of _____, 20____.

Signature: _____

Name: _____

CNIC No.: _____

Designation: _____

Company Name: _____

Contact Details: _____

Sui Southern Gas Co. Ltd. Procurement Dept. H.O. Gulshan-e-Iqbal

(Company Stamp / Seal Mandatory)