

**PUBLIC PROCUREMENT REGULATORY
AUTHORITY (PPRA)**

CONTRACT AWARD PROFORMA - I
(As per Rule 47 of PP Rules, 2004)

**To Be Filled And Uploaded on PPRA Website In Respect of All
Public Contracts of Works, Services and Goods**

- NAME OF THE ORGANIZATION/DEPTT. **Sui Northern Gas Pipelines Ltd.**
- FEDERAL / PROVINCIAL GOVT. **Public Sector Organization**
- TITLE OF CONTRACT
- | |
|-------------------|
| Purchase order #. |
| HOP/MGA/005/23 |
- TENDER NUMBER **SN-4508/23**
- BRIEF DESCRIPTION OF CONTRACT **RELIEF VALVES**
- TENDER VALUE **Rs.61.785 million Approx.**
- ENGINEER'S ESTIMATE _____
(for civil Works only)
- ESTIMATED COMPLETION PERIOD **14 weeks**
- WHETHER THE PROCUREMENT WAS INCLUDED IN ANNUAL
PROCUREMENT PLAN? **Yes /No**
- ADVERTISEMENT :
 - (i) PPRA Website **Yes** (Federal Agencies)
 - (ii) (If yes give date and PPRA's tender number) **TS513254E**
 - (iii) News Papers Daily Jang on 11.06.23
(If yes give names of newspapers and dates)
- TENDER OPENED ON (DATE & TIME) 22.08.2023 **1600 HRS**
- NATURE OF PURCHASE **Local / International**
- EXTENSION IN DUE DATE (If any) **Yes**

2 sui 19224. (

➤ NUMBER OF TENDER DOCUMENTS SOLD 06
(Attached List of Buyers)

➤ WHETHER QUALIFICATION CRITERIA
WAS INCLUDED IN BIDDING/TENDER DOCUMENTS **Yes** / No
(If yes enclose a copy).

➤ WHETHER BID EVALUATION CRITERIA
WAS INCLUDED IN BIDDING/TENDER DOCUMENTS **Yes** / No
(If yes enclose a copy).

➤ WHICH METHOD OF PROCUREMENT WAS USED: - (Tick one)

a) SINGLE STAGE – ONE ENVELOPE PROCEDURE

b) SINGLE STAGE - TWO ENVELOPE PROCEDURE. √

b) TWO STAGE BIDDING PROCEDURE.

c) TWO STAGE – TWO ENVELOPE BIDDING PROCEDURE.

- PLEASE SPECIFY IF ANY OTHER METHOD OF PROCUREMENT WAS
ADOPTED WITH BRIEF REASONS (i.e EMERGENCY, DIRECT
CONTRACTING, NEGOTIATED TENDERING ETC.) **N.A**

- WHO IS THE APPROVING AUTHORITY **DMD**

➤ WHETHER APPROVAL OF COMPETENT AUTHORITY WAS OBTAINED
FOR USING A METHOD OTHER THAN OPEN COMPETITIVE BIDDING. **N.A**

➤ NUMBER OF BIDS RECEIVED 02

➤ WHETHER THE SUCCESSFUL BIDDER WAS LOWEST BIDDER **Yes** / No

➤ WHETHER INTEGRITY PACT WAS SIGNED **Yes** / No

**PUBLIC PROCUREMENT REGULATORY
AUTHORITY (PPRA)**

CONTRACT AWARD PROFORMA – II
(As per Rule 47 of PP Rules, 2004)

To Be Filled And Uploaded on PPRA Website In Respect of All
Public Contracts of Works, Services & Goods

➤ NUMBER OF BIDDERS PRESENT AT THE TIME OF
OPENING OF BIDS 01

➤ NAME AND ADDRESS OF THE SUCCESSFUL BIDDER

| Purchase Order No. | Supplier's Name. | Value Including GST (Rs) |
|--------------------|---------------------------------------|--------------------------|
| HOP/MGA/005/23 | M/s. Professional Engineering, Lahore | 11,422,400 |

➤ RANKING OF SUCCESSFUL BIDDER IN EVALUATION REPORT
(i.e. 1st, 2nd, 3rd EVALUATED BID).

| Name of Bidder | Evaluation Results/Remarks |
|---------------------------------------|----------------------------|
| M/s. Professional Engineering, Lahore | Lowest priced bidder |

➤ NEED ANALYSIS (Why the procurement was necessary?) **To Expand the network as well as in the interest of GOP**

➤ IN CASE EXTENSION WAS MADE IN RESPONSE TIME, WHAT WERE
THE REASONS (Briefly describe) Yes single bid received

- WHETHER NAMES OF THE BIDDERS AND THEIR PRICES WERE READ OUT AT THE TIME OF OPENING OF BID. Yes / No

- DATE OF CONTRACT SIGNING (**Copy enclosed**)

| Purchase Order No. | Supplier's Name. | Date |
|--------------------|---------------------------------------|------------|
| HOP/MGA/005/23 | M/s. Professional Engineering, Lahore | 08.12.2023 |

(Attach a copy of agreement)

- CONTRACT AWARD PRICE

| Purchase Order No. | Supplier's Name. | Value Including GST (Rs) |
|--------------------|---------------------------------------|--------------------------|
| HOP/MGA/005/23 | M/s. Professional Engineering, Lahore | 11,422,400 |

- WHETHER COPY OF EVALUATION REPORT GIVEN TO ALL BIDDERS _____ Yes / No
(Attach copy of the bid evaluation report)

- ANY COMPLAINTS RECEIVED _____ Yes / No
(If yes result thereof)

- ANY DEVIATION FROM SPECIFICATIONS GIVEN IN THE TENDER NOTICE/DOCUMENTS _____ Yes / No
(If yes give details)

- DEVIATION FROM QUALIFICATION CRITERIA _____ Yes / No
(If yes give details)

- SPECIAL CONDITIONS, IF Any
(Give Brief Description)

Nil

RECEIPT NO.
06 SEP 2023
SGM (P)

RECEIVED
M. G. D. H.
6/9

6/9
Imran Ahmad Khan
6/9

6/9
Imran Ahmad Khan

Encl: As above

IMRAN AHMAD KHAN
INCHARGE (MC) PROJECTS

This refer to your memo dated: 05.09.2023 regarding the subject.
Joint evaluation of the bid received against the subject tender enquiry is the being attached

TENDER ENQUIRY # SN-4508/23

CHECK / RELIEF VALVE

JOINT EVALUATION

THRU: SGM (P)

REF: SN-4508/23 DATED: 05.09.2023

TO: GENERAL MANAGER (PROCUREMENT)

FROM: INCHARGE (MC) PROJECTS

MEMORANDUM
SUI NORTHERN GAS PIPELINES LIMITED



6/9
Imran Ahmad Khan

SN-4508/23

Dated: 05.09.2023

Thru: Incharge (MC) P

JOINT EVALUATION
CHECK/ RELIEF VALVE
TENDER ENQUIRY SN-4508/23

The subject tender enquiry was advertised for the following items:

| Item No. | Description | Quantity (Nos.) |
|----------|---|-----------------|
| 1 | Check Valve 8" dia, FE, RTJ, CI-600 | 4 |
| 2 | Check Valve 20" dia, RTJ, CI-600 | 1 |
| 3 | RELIEF Valve 1"x2" dia, FE, RF, CI-150 | 1 |
| 4 | RELIEF Valve 6"x8" dia, FE, RF, CI- 300/150 | 1 |
| 5 | Check Valve 1" dia, SE, CI-600 | 7 |
| 6 | RELIEF Valve 4"x6" dia, FE, RF, CI- 300/150 | 2 |
| 7 | RELIEF Valve, FE, RF, CI- 150 1"x2" Set at 165#, 10% over pressure | 1 |

1. M/s GLOW PAK International, Lahore. TA (182?)
Manufacturer: M/s Industrial De Valvulas S.A DE C.V Mexico TNA (7)

They have submitted bid against SOR items 1,2 & 5 for supply of Check Valves manufactured by M/s Industrial de Valvulas S.A. DE C.V. Mexico. Authority letter, ISO 9001:2015 certificate of the quoted manufacturer valid till 04.11.2023, API accreditation to use official API monogram to manufacturer valid till 04.11.2023, clause by clause commentary and copy of technical literature were submitted with the bid. Fire safe certificate provided by them in previous tender enquiries SN-4210/21 and SN-4274/21 are being considered here.

They have offered a delivery period of 150 days in their bid after operative L/C against the tendered stipulated delivery period of 14 weeks after receipt of an operative L/C.

The Company is already using similar Check Valves from the same manufacturer with satisfactory performance and they have supplied up to 30" dia Check Valve vide PO no. NT-1237/18. Their offer meets technical specifications and as such is vetted **technically responsive against SOR items 1 & 2.**

However, they have quoted Piston type Check Valve for SOR item no. 5 against the tender requirement of Swing Check valve. This is not acceptable; hence **the offer against item no. 5 is vetted technically non-responsive.**

Procurement department is requested to take up the matter with the bidder to reduce the delivery period to bring it in line with the tendered stipulated delivery period of 14 weeks after receipt of operative L/C (also agreed by bidder in "Appendix-D"), if purchase order is placed to them.

2. M/s PROFESSIONAL ENGINEERING SERVICES, LAHORE.

Manufacturer: M/s Lesser GmbH & Co. KG Hamburg, Germany

They have submitted bid against SOR items 3,4,6 & 7 for supply of Relief Valves manufactured by M/s Lesser GmbH & Co. KG Hamburg, Germany. Authority letter, ASME UV certificate valid till 16.06.2024, The National Board of Boiler & Pressure Vessel Inspectors Certificate of Authorization NB valid till 16.06.2024, clause by clause commentary and copy of technical literature were submitted with the bid.

They have offered a delivery period of 12-14 weeks in their bid after operative L/C against the tendered stipulated delivery period of 14 weeks after receipt of an operative L/C.

Clarifications were sought vide email dated 04.09.2023 against the following deficiencies / discrepancies observed in their technical bid;

Quote

Kindly advise bidder M/s PROFESSIONAL ENGINEERING SERVICES, LAHORE to provide Appendix "D"/ Questionnaire & valid ISO 9001:2015 certificate.

Unquote

Appendix "D"/ Questionnaire provided by Procurement department from their file and ISO 9001:2015 certificate valid till 20.04.2025 extracted from Manufacturers website.

Company has already procured Relief Valves from the same manufacturer in the past which are performing satisfactorily. Their offer meets technical specifications and as such is vetted **technically responsive against SOR items 3,4,6 & 7.**

Kindly note that, no bid has been evaluated responsive for SOR item no. 5 in the subject Tender enquiry, so it may be included in a subsequent Tender Enquiry on most urgent basis.

Kashif Amin
Kashif Amin
Officer (Procurement)

*While the extent of
Commissionable basis is
only*

Imran Gul
Imran Gul
Senior Engineer (MC-P)

SUI NORTHERN GAS PIPELINES LTD.

Gas House, 21 Kashmir Road, Lahore (Pakistan.)

LOCAL PURCHASE ORDER NO. HOP/MGA/005/23

Date: 23.10.2023

Net Cost Rs. **11,422,400.00**

M/s. Professional Engineering Services,
127 - B. Commercial Sector - C,
Bahria Town,
Lahore.

Order Despatched On 8/12/23

Subject: **RELIEF VALVES**

Reference: Your Quotation 100-23-1234 dated 22.08.2023, in response of our Tender Enquiry SN-4508/23 dated 12.06.2023.

Dear Sir,

We are pleased to place an order on you for the following items, subject to terms and conditions printed overleaf, Charges, additions, thereto, including those to the ordered equipment or material will be authorized solely by an amendment to this order which will be executed in the same manner as this order.

| Tender Item # | Index # | DESCRIPTION | Unit | Qty. | FOR Rate (Rs.) | Total Value (Rs.) |
|--|--------------------|---|------|------|--|-------------------|
| RELIEF VALVES | | | | | | |
| 3 | 16.010.00183.03.00 | LESER Model No.5262.0154, Size 1" x 2" CI150/150RF, Orifice "E", Body WCB, Set Pressure 165 PSIG, with EN3.1 Test Certificate, Hydrotest etc. | Nos. | 1 | 655,000 | 655,000 |
| 4 | 16.012.00020.03.00 | LESER Model No.5262.6584, Size 6" x 8" CI300/150RF, Orifice "Q", Body WCB, Set Pressure 165 PSIG, with EN3.1 Test Certificate, Hydrotest etc. | Nos. | 1 | 2,970,000 | 2,970,000 |
| 6 | 16.010.00013.03.00 | LESER Model No.5262.6474, Size 4" x 6" CI300/150RF, Orifice "P", Body WCB, Set Pressure 165 PSIG, with EN3.1 Test Certificate, Hydrotest etc. | Nos. | 2 | 2,700,000 | 5,400,000 |
| 7 | 16.010.00183.03.00 | LESER Model No.5262.0154, Size 1" x 2" CI150/150RF, Orifice "E", Body WCB, Set Pressure 165 PSIG, with EN3.1 Test Certificate, Hydrotest etc. | Nos. | 1 | 655,000 | 655,000 |
| All other specification as per your quotation. | | | | | Total: | 9,680,000 |
| Make & Origin: LESER, GERMANY | | | | | GST @ 18 % | 1,742,400 |
| | | | | | Total FOR Manga value including 18% GST | 11,422,400 |

(Rupees: Eleven million four hundred twenty two thousand & four hundred only)

Yours faithfully,

SUI NORTHERN GAS PIPELINES LIMITED

(ASIM ALI MUK)

Chief Officer Procurement
for MANAGING DIRECTOR

Delivery: As per Annex:1

If needed please, contact Mr. Haider Abbas

| | | |
|---|-------------|--|
| Indentor: | GM (MC) P | Indent No. HO/P/IB/0519/23 & HO/P/IB/0262/23 |
| A/c No. | Store Stock | PCS No. 5932 dated 15.09.23. Joint Technical vetting received vide memo # SN-4508/23 dated 05.09.2023 (received on 06.09.23) |
| Management Sanctions. Inventory/2022-23/033-29 (5389) utilized amount Rs.3,625,000/- & PRJ/SEZ/SMS-BWP/004 (5047) utilized amount Rs.6,055,000/-. | | |

cc: Accounts
cc: Stores Office
cc: GM (PT)

cc: Material Receiving Stores
cc: Indentors
cc: Inventory Section

SUI NORTHERN GAS PIPELINES LIMITED**PURCHASE ORDER HOP/MGA/005/23****M/s. Professional Engineering, Lahore**

- 1 Substandard/defective material will be replaced by you on "NO CHARGE BASIS" even after our acceptance.
- 2 The prices are FOR Manga Stores inclusive of all taxes, duties, sales tax etc. including unloading charges at delivery site. Delivery will be accepted from Monday to Friday during 0800 to 1400 hrs.
- 3 Supplied material is liable to be technically/physically inspected by us and if not found according to our specifications, we reserve the right to cancel our purchase order at your risk and cost.

4 PAYMENT

Payment of your bills will be made by our Accounts Department within 30 days time after satisfactory completions of delivery and submission of Bills. Your bill in duplicate accompanied by a receipted copy of Delivery Challan should be submitted within 30 days of the date of delivery of the material. Any delay in submitting the bills will result in corresponding delay in payment.

5 PERFORMANCE/WARRANTY BOND GUARANTEE

Please arrange to provide at your own cost Performance/Warranty Bond Guarantee (specimen already with you) @ 10% of the total value (excluding sales tax) of the purchase order within 15 days after receipt of purchase order. The Performance/Warranty Bond Guarantee should remain valid for twelve (12) months after the last portion of goods have been delivered to final destination. Furthermore, you will also provide integrity pact as per format already provided with tender enquiry.

DELIVERY/WARRANTY

- 7 You will deliver total quantity of Material **within 12-14 weeks** after receipt of purchase order, at our Manga Stores, 38-Km, Multan Road, Lahore for items # 3 & 4 and at our Multan Base Store, Piran Ghaib Road, Multan for items # 6 & 7. However, you will try to improve the delivery period. Warranty of supplied material will be 18 months.

8 FURTHER INFORMATION OF REQUIRED MATERIAL

Full nozzle type, spring loaded safety valve with lifting lever and reaction hood for rapid lift, in accordance with ASME presser vessel code section VIII, Div-I and API RP520:-

- | | |
|---|-------------------------------------|
| - Precision lapped flat metal to metal seat | - stable chatter free operation |
| - Conventional type, NOT – PILOTOPERATED | - UV/NB stamped and certified |
| - Seat Tightness / Seat Leakage certificate | - Hydro test report body and Bonnet |
| - Material Test Report of the Valve Body and bonnet | - With 01-Set of spares trim kit |
| - Blowdown setting 5-7% | - Temperature Range -20 to 130F |
| - Back Pressure Atmospheric | - Set Pressure 165 PSIG |

Material of Construction:-

- | | | |
|-------------------------|---|--|
| 1- Body & Bonnet | : | Carbon steel, SA 216 Gr. WCB/WCC |
| 2- Cap | : | A105C101 |
| 3- Nozzle | : | AISI 316 Stainless steel |
| 4- Nozzle Ring | : | AISI 304 Stainless steel |
| 5- Guide | : | AISI 304 Stainless steel |
| 6- Disc | : | AISI 304 Stainless steel |
| 7- Stem | : | AISI 410 Stainless steel |
| 8- Spring | : | AISI 304 Stainless steel/High Alloy Steel/SS |
| 9- Spindle | : | AISI 304 Stainless steel |
| 10- Adjusting Screw | : | AISI 410 Stainless steel |
| 11- Adjusting Screw Nut | : | AISI 410 Stainless steel |
| 12- Disc Retainer | : | Inconel/S.S |
| 13- Guide Retainer | : | AISI 304 Stainless steel |
| 14- Set Screw | : | AISI 304 Stainless steel |
| 15- Body/Bonnet Gasket | : | Soft-Iron or Stainless Steel |
| 16- Bonnet/Cap Gasket | : | Soft-Iron or Stainless Steel |
| 17- Set Screw Gasket | : | ARMCO / Suitable Material |




- Stable Chatter-Free Valve Operation
- Metal to Metal Seat
- Safety Valve ASME-VIII-Div-1 and ISO9000 Certified
- Mfg having UV/NB valid stamped
- Seat tightness Certificate (Seat Leakage Report)
- Hydro Test Report of safety valves
- Material Test Report of valve Body & Bonnet

9 LATE DELIVERY CHARGES

- 9.1 If the material, as given in the order has not been dispatched/delivered as per stipulations in the contract except on account of Force Majeure, within the delivery period given in the contract, Sui Northern Gas Pipelines Limited shall be entitled to recover 1% (one percent) of the total value of the contract price (excluding sales tax) of the delayed part of material for each week of delay, by way of Late Delivery Charges and not by way of penalty subject to maximum of 10% of the total value (excluding sales tax) of the delayed part of the material. The period for calculation of Late Delivery charges shall be reckoned in number of days for which the material will be delayed.
- 9.2 The payment of such Late Delivery Charges shall not relieve the supplier from performing and fulfilling its obligations under the contract nor will be correspondence rights and entitlements of Sui Northern be affected or reduced in any manner.
- 9.3 Whenever Late Delivery Charges become payable, Sui Northern Gas Pipelines Limited, shall quantify the same and serve a written notice upon the supplier requiring immediate payment thereof. If the supplier fails to remit payment within 15 days of receipt of such notice served under registered postal cover, Sui Northern will become entitled to recover the same forthwith by calling upon the Performance/Warranty Bond Guarantee. Any withdrawals by way of Late Delivery Charges out of the Performance/Warranty Bond Guarantee will be made good by the supplier within 60 days of receipt for the above referred notice by way of amendment to the Performance/Warranty Bond Guarantee failing which the remaining portion of this Guarantee would become en-cashable in the favour of the Buyer on account of any such failure.
10. All terms and conditions of the tender enquiry No. **SN-4508/23** and those which have been agreed through exchange of correspondence after bid opening are integral part of this purchase order.

Yours Faithfully,
SUI NORTHERN GAS PIPELINES LIMITED


(ASIM ALI MHR)
Chief Officer (Procurement)
for MANAGING DIRECTOR



LIST OF SUPPLIER WHOM TENDER ISSUED AGAINST PAYMENT

TENDER ENQUIRY # SN- 4508/23 COVERING Check/Relief Value

| Sr. No. | Receipt No./DD | Date | Name of Suppliers | Supp. Sign/ tender sent on |
|---------|----------------|----------|-----------------------------|----------------------------|
| 1 | 01524356 | 16-06-23 | M/S - International Trade | 16-06-23 |
| 2 | 00709859 | 16-06-23 | M/S - Glass Pak Int'l | 20-06-23 |
| 3 | 26064554 | 22-06-23 | M/S - Akwariat Pvt. Ltd | 03-07-23 |
| 4 | 07256764 | 10-07-23 | M/S - Professional Eng'g | 10-07-23 |
| 5 | 7186716 | 25-7-23 | M/S Rana Trades - Islamabad | 01-08-23 |
| 6 | 58375713 | 17-07-23 | M/S Ahmad & Co. Lahore | 01-08-23 |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |
| 29 | | | | |
| 30 | | | | |

Amendments

| | |
|----|--------------------------|
| 1- | 1st Amendment - 16-07-23 |
| | |
| | |
| | |



SPECIFICATIONS

Doc. # SNF-SPC-GVL-1

Rev. # 00

Rev. Date 18 Mar 2014

Page Page 2 of 4


SNC
Procurement
SPECIFIC

Title Check Valves (ANSI CL 150 / 300 / 600)

| Valve Size | Shell Test (Minutes) | Seat Test (Minutes) |
|---------------|----------------------|---------------------|
| Upto 4" | 2 | 2 |
| 6" to 10" | 5 | 5 |
| 12" to 18" | 15 | 5 |
| 20" and above | 30 | 5 |

| Test Pressure | Shell Test (Bar) | Seat Test (Bar) |
|---------------|------------------|-----------------|
| ANSI CL600 | 153 | 114 |
| ANSI CL300 | 77 | 56 |
| ANSI CL150 | 30 | 21 |

- 4.4 Valves shall also be subjected to Air Seat Tests subsequent to hydrostatic test. Pressure for such air test shall be at least 5.5 bar for a period of 5 minutes specified hereunder.
Valves subjected to an air test shall show no leakage except valves having metal-to-metal seats for which maximum permissible rate of air leakage per millimeter of nominal seat diameter shall be 110 ml/h.
- 4.5 Pressure shall be applied in the direction of required flow blockage.
- 4.6 Manufacturer shall furnish a report of pressure tests performed. Such reports shall include the test pressures and test durations.
- 4.7 The bidders shall furnish along with their bids details of testing to be carried out i.e. Shell/Seat Test, duration of testing. Furthermore the bidders shall specify the maximum operating/working pressure (MOP) for the offered valves.
- 4.8 The bidders shall provide complete details of non-destructive testing to be carried out.
- 4.9 Bids received without information stated at Cl.4.6 and 4.7 above will not be entertained.
5. VALVE END CONNECTIONS:
- 5.1 END FLANGES: End Flanges shall be furnished with raised face or ring joint as specified in schedule of requirements. Dimensions and tolerances, including drilling templates, flange facing spot facing and back facing shall conform to ANSI B16.5 for size upto 24" and MSS-SP44 for size exceeding 24" dia. End Flanges shall be fully machine finished on the joint side. Gasket contact surface for all raised face shall have a serrated finish conforming to MSS SP-6.
6. PACKING, PAINTING AND PROTECTION:
- 6.1 Packing shall be sufficiently robust to withstand rough handling during ocean shipment and up-country journey. All items shall have their respective identification letters or numbers painted on body and these shall be suitably packed to provide ease of handling and storage and maximum protection during transport and storage periods. Crates or boxes shall have a list of items contained therein secured to the exterior by means of an enveloping piece of tin sheet nailed to the wood. A duplicate list shall also be included inside with the contents.
- 6.2 Protection of the equipment against corrosion/deterioration shall be given special attention. Machined steel and iron parts shall be heavily greased/varnished as a preventive against rust and grease where used shall be

| SPECIFICATIONS | | Doc. # | SNP-SPC-CVL-1 | SPECIFIC Procurement |
|---|-------|--|---------------|-------------------------|
|  | Title | Rev. # | 00 | |
| | | Rev. Date | 18 Mar 2014 | |
| | | Page | Page 3 of 4 | |
| | | Check Valves (ANSI CL 150 / 300 / 600) | | |

- such that it retains its consistency, and does not melt at tropical temperatures and is acid free.
- 6.3 Steel valves shall be shipped with the faces of the Flanges or the welding ends protected over the entire contact surfaces with suitable protectors securely attached to the valves. Handwheels/Wrenches shall be packed separately.
7. **QUALITY OF MATERIAL:**
The materials used in the construction of the subject item shall be the best of their respective kinds and of the nature which experience has shown to be the most suitable for the purpose. Special consideration shall be given to galvanic electrolytic and other destructive actions upon the subject item.
8. **INSPECTION AND TESTS:**
- 8.1 All Cast bodies shall be subjected to radiography and magnetic particle examination to ANSI B 16.34 Section B and Test reports to this effect shall be submitted.
- 8.2 All welds, forgings and plates shall be 100% NDT tested and test reports shall be furnished.
- 8.3 All valves and ancillary equipment shall be subject to inspection at our discretion, but such inspection shall not relieve suppliers of their responsibility to supply correct material in accordance with this specification.
- 8.4 Except where otherwise agreed the tests called for in this specification shall be carried out in the presence of our Representative appointed for the purpose and to his satisfaction. All appliances, apparatus, labor, etc., necessary for these tests shall be provided by the supplier at his cost.
- 8.5 Material test certificate shall be furnished by the manufacturer.
9. **MANUFACTURER'S GUARANTEE:**
The manufacturer shall guarantee the material, design and operation of the valves covered by the purchase order, to the extent that if any defects chargeable to faulty workmanship, design, or material are found in the valves within a period of two years after the valves are installed in regular service, the manufacturer shall furnish replacement for any defective part or parts thereof free of charge. If the valve is found defective at the time it is placed in service, the manufacturer shall replace it.
10. **COMPLIANCE:**
The manufacturer will be responsible for complying with all the provision of this specification a certificate to this effect shall be furnished with the bid. Any variation from the specifications shall be specifically indicated by the bidder in their offer.
11. **TRACEABILITY/IDENTIFICATION:**
Each valve shall be suitably and permanently marked with valve identification/traceability information/data which shall include the following:-
ANSI Class
Valve Size/Type
Manufacturer's name and year of manufacturing and any specific identification
No. as per their Catalogue.
Purchase Order/Contract No.

4



SPECIFICATIONS

| | | | | |
|-------|--|-----------|---------------|---------|
| Title | Check Valves (ANSI CL 150 / 300 / 600) | Doc. # | SNE-SPC-CVL-1 | 8 |
| | | Rev. # | 00 | Proc |
| | | Rev. Date | 18 Mar 2014 | SPECIFI |
| | | Page | Page 4 of 4 | |

12. NATURAL GAS ANALYSIS AND SITE CONDITIONS:
12.1 NATURAL GAS ANALYSIS

| | | |
|----------------------|---|-----------------------------------|
| BTU/ft ³ | : | 900 - 1200 |
| Total Sulphur | : | <20 grains / 100 Scf. |
| Gas Specific Gravity | : | 0.6 - 0.7 |
| Hydrogen Sulphide | : | <1 grain/100 Scf. |
| Water | : | <7 lbs/million cu.ft. @ 14.7 Psig |

12.2 SITE CONDITIONS:

The following refers to maximum conditions likely to be met along the pipeline route:

| | |
|---------------------------|-------|
| Maximum Shade Temperature | 130°F |
| Minimum Shade Temperature | 25°F |
| Humidity @ 70°F | 85 % |
| Humidity @ 95°F | 78 % |
| Humidity @ 105°F | 76 % |
| Humidity @ 120°F | 70% |

Altitude varies between 400 feet and 1700 feet above sea level.
Atmosphere - Saliniferous corrosive and dusty.

13. ACCREDITATIONS/CERTIFICATIONS:

- 13.1 All valves shall meet the fire safe requirement of API 6FD (latest edition) for fire test valves from Cl.150 through Class 600 and a valid Certificate to that effect shall be furnished. Fire-safe qualified valves must be proven in natural gas service for a minimum period of three years.
- 13.2 The manufacturer must have API accreditation to use official API monogram to manufacture valves in accordance with the requirements of API 6D. A current/valid certificate to this effect must be submitted at the time of bid opening date.
- 13.3 The manufacturer and supplier must have relevant ISO 9001 accreditation and a current/valid certificate to this effect must be submitted at the time of bid opening.

A