

	Request for Quotation	Doc. No	NLM-QUO-25/053
		Revision	3
		Page	4 of 4

RFQ Number	NLM-QUO-25/053
Request for Quotation Date	11 July 2025
RFQ Closing Date	01 Augus 2025
RFQ Closing Time	17:00
Compulsory Site Briefing	Not compulsory but if more information required can be arranged
Contact Person	Thulile Sokhela
Quotation Validity	90 Days from the closing date
Submission Details	RFQ Response must be sent to: Thulile.Sokhela@ntp.co.za
RFQ Description	RFQ to Supply System manual valves for PTFE Filter Destruction Project

Dear Service Provider

Kindly provide a quotation for goods and or services as outlined in section 2 of this document.

1. Introduction

The South African Nuclear Energy Corporation Limited (Necsa) is a state-owned public company (SOC), registered in terms of the Companies Act, (Act No. 61 of 1973), registration number 2000/003735/06.

The Necsa Group engages in commercial business mainly through its wholly-owned commercial subsidiaries: NTP Radioisotopes SOC Ltd (NTP), which is responsible for a range of radiation-based products and services for healthcare, life sciences and industry, and Pelchem SOC Ltd (Pelchem), which supplies fluorine and fluorine-based products. Both subsidiaries, together with their subsidiaries, supply local and global markets, earning valuable foreign exchange for South Africa and are among the best in their field in their respective world markets.

Necsa's safety, health, environment and quality policies provides for top management commitment to compliance with regulatory requirements of ISO 14001, OHSAS 18001 and RD 0034 (Quality and Safety Management Requirements for Nuclear Installations), ISO 9001 and ISO 17025.

Necsa promotes the science, technology and engineering expertise of South Africa and improves the public understanding of these through regular communications at various forums and outreach programmes to the community. We are a proudly South African company continuously striving, and succeeding in many respects, to be at the edge of science,

	Request for Quotation	Doc. No	NLM-QUO-25/053
		Revision	3
		Page	4 of 4

technology and engineering related to the safe use of nuclear knowledge to improve our world.

For more information on Necsa, please visit: WWW.Necsa.co.za

2. Background

Necsa plans to establish a plasma gasification demonstration facility in a laboratory on-site to volumetrically reduce uranium-containing PTFE candle filters. Valves are utilized in various applications within the facility. A number of valves are required as per the attached valve list.

3. Scope of Work

Item Description	Quantity
To Supply System Manual Valves for PTFE Filter Destruction Project.	As per list (ENS-FDP-LST-24002)

4. Attachments

Ref #	DOCUMENT NAME	DESCRIPTION
01	ENS-FDP-LST-24002	PTFE Filter Destruction Plant System Valve List

5. Pricing

- All price quoted to include all applicable taxes.
- Price must be fixed and firm
- Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable, disbursements etc.
- Quotation must be completed in full, incomplete quote could result in a quote being disqualified.
- Payment will be according to Necsa's General Conditions of Purchase.

6. Evaluation

6.1. Phase 1- Functionality Evaluation / Technical Evaluation

Where functional or technical evaluation criterion is applicable, assessment will be performed in terms of the criterion listed below and the criterion may include Technical, Performance, Quality and Risk.

	Request for Quotation	Doc. No	NLM-QUO-25/053
		Revision	3
		Page	4 of 4

If the Bidder's response to the Technical templates does not indicate that the Bidder can support an acceptable technical solution, the Bidder's response will be rejected and not evaluated further.

Together the Technical, Performance & Quality and Risk criteria make up the functionality criterion and a Bidder's Proposal will be evaluated for functionality out of a possible 100 points. Only RFQ responses achieving an evaluation score of greater than the set threshold points out of the possible 100 points and which score a number of points for functionality that is greater than or equal to the set threshold points of the number of points achieved by the highest scoring Bid for functionality will be selected to progress to the second stage.

The quotations will be evaluated according to the following selection criteria (based on information requested above):

Item	Requirement	Weight	Points	Criteria
1	ISO 9001: 2015 (or latest) accredited Supplier must provide evidence (ISO 9001 certificate)	40	40	ISO 9001 accreditation of supplier of the required products. OR ISO 9001 accreditation of OEM and OEM letter listing local supplier as authorised supplier and service agent
3	Supplier lead-time Supplier must specify lead-time	40	40	Product available within 4 weeks of issue of Purchase Order
			20	Product available within 6 weeks of issue of Purchase Order
			10	Product available within 8 weeks of issue of Purchase Order
4	Suitability of Product	20	20	Supplier adequately demonstrates how the recommended product meets the user's requirements or specifications
Total		100		

Note: Bidders that score <80 out of 100 in respect of Technical/Functional evaluation criteria will be regarded as submitting a non-responsive bid and will not be evaluated further.

	Request for Quotation	Doc. No	NLM-QUO-25/053
		Revision	3
		Page	4 of 4

6.2. **Phase 2 - Evaluation In Terms Of Preferential Procurement Policy Framework Act, 2022**

This bid will be evaluated and adjudicated according to the 80/20 point system, in terms of which a maximum of 80 points will be awarded for price and 20 points will be allocated based on the specific goals (B-BBE status level).

	POINTS
PRICE	80
SPECIFIC GOALS (B-BBEE status level)	20
Total points for Price and SPECIFIC GOALS	100

Preference goal

B-BBEE status level contributor

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

7. **Required Documentation**

- Tax Clearance Certificate (Tax pin issued by SARS)
- Declaration of interest (SBD 4)
- BEE Certificate / Applicable Affidavit if classified as EME
- Letter of Good Standing (COID) only if Applicable due to the nature of work required
- Any other document or certification that might have been requested on this RFQ
- Supply pump data sheet and curves documents.

	Request for Quotation	Doc. No	NLM-QUO-25/053
		Revision	3
		Page	4 of 4

8. Important

- 8.1. Quotation must be submitted on or before the RFQ closing date and time stated above.
- 8.2. Orders above R 30 000 will be evaluated according to the PPPFA 80/20-point system and a functionality scorecard where applicable and the ones above R 1 Million will be subjected to the tender process.
- 8.3. This RFQ is subjected to the Necsa's General Conditions of Purchase, Preferential Procurement Policy Framework Act 2000 and the Preferential Procurement Regulations, 2022, the General Conditions of Contract (GCC) and, if applicable, any other legislation or special conditions of contract
- 8.4. Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for specific goals are not claimed.
- 8.5. The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to specific goals, in any manner required by the purchaser.
- 8.6. For a Bidder to obtain clarity on any matter arising from or referred to in this document, please refer queries, in writing, to the contact details provided above. Under no circumstances may any other employee within Necsa be approached for any information. Any such action might result in a disqualification of a response submitted in competition to this RFQ.
- 8.7. No goods and/or services should be delivered to Necsa without an official Necsa Purchase order.
- 8.8. Necsa reserves the right to; cancel or reject any quote and not to award the RFQ to the lowest Bidder or award parts of the RFQ to different Bidders, or not to award the RFQ at all.
- 8.9. The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any Necsa employee or its representatives. Such an act shall constitute a material breach of the Agreement and the Necsa shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights
- 8.10. By responding to this request, it shall be construed that: the bidder, hereby acknowledge to be fully conversant with the details and conditions set out in the Necsa's General Conditions of Purchase, Preferential Procurement Policy Framework Act 2000 and the Preferential Procurement Regulations, 2022, the General Conditions of Contract (GCC), Technical Information and Specifications attached, and hereby agree to supply, render services or perform works in accordance therewith

1					2	3	4	5	6	7		8		9		10	11				12				
Valve Tag No.					Valve Type	P&ID Number	Location (Line No. / Equipment No.)	Fluid (Notes 2, 3, 4 & 5)	Fluid State	Design Conditions		Operating Conditions		SSC Safety Class		Normal Position	Process Connection				Materials of Construction				
Fluid Code	System No.	Valve No.	Valve Code	Valve Size						Temp. [°C]	Press. [kPa(g)]	Temp. [°C]	Press. [kPa(g)]	Nuclear (N)	Chemical (C)		Size	Type	Flange Spec.	Flange Rating	Body	Trim	Packing / Seal	Plug / Ball / Disc	Bonnet / Cap
NH	833	109	SU	15	Non-Return Valve	ENS-FDP-PID-24005	15-833-NHVP-061	Nitrogen	Gas	93	20685	Amb	400	Non-classified	SC-3	N/A	15	weld neck flange R182-F304/304L	Class 1500	SS	SS	API 602	SS	N/A	
GA	833	110	SB	15	Ball Valve	ENS-FDP-PID-24005	15-833-GAVP-062	Argon	Gas	93	20685	Amb	400	Non-classified	SC-3	NO	15	weld neck flange R182-F304/304L	Class 1500	316 SS	316 SS	GRAPHITE	316 SS	316 SS	
GA	833	111	SU	15	Non-Return Valve	ENS-FDP-PID-24005	15-833-GAVP-063	Argon	Gas	93	20685	Amb	400	Non-classified	SC-3	N/A	15	weld neck flange R182-F304/304L	Class 1500	SS	SS	API 602	SS	N/A	
MG	833	112	SB	15	Ball Valve	ENS-FDP-PID-24005	15-833-MGVP-062	Methane	Gas	93	20685	Amb	100	Non-classified	SC-3	NO	15	weld neck flange R182-F304/304L	Class 1500	316 SS	316 SS	GRAPHITE	316 SS	316 SS	
MG	833	113	SU	15	Non-Return Valve	ENS-FDP-PID-24005	15-833-MGVP-063	Methane	Gas	93	20685	Amb	100	Non-classified	SC-3	N/A	15	weld neck flange R182-F304/304L	Class 1500	SS	SS	API 602	SS	N/A	
GS	833	114	SB	15	Ball Valve	ENS-FDP-PID-24005	15-833-GSVP-064	Oxygen	Gas	93	20685	Amb	400	Non-classified	SC-3	NO	15	weld neck flange R182-F304/304L	Class 1500	316 SS	316 SS	GRAPHITE	316 SS	316 SS	
GS	833	115	SU	15	Non-Return Valve	ENS-FDP-PID-24005	15-833-GSVP-064	Oxygen	Gas	93	20685	Amb	400	Non-classified	SC-3	N/A	15	weld neck flange R182-F304/304L	Class 1500	SS	SS	API 602	SS	N/A	
PG	833	116	SB	15	Ball Valve	ENS-FDP-PID-24005	15-833-PGVP-065	LPG	Gas	93	20685	Amb	100	Non-classified	SC-3	NO	15	weld neck flange R182-F304/304L	Class 1500	316 SS	316 SS	GRAPHITE	316 SS	316 SS	
PG	833	117	SU	15	Non-Return Valve	ENS-FDP-PID-24005	15-833-PGVP-065	LPG	Gas	93	20685	Amb	100	Non-classified	SC-3	N/A	15	weld neck flange R182-F304/304L	Class 1500	SS	SS	API 602	SS	N/A	
KO	831	119	SB	25	Ball Valve	ENS-FDP-PID-24003	25-831-KOVP-069	KOH Solution	Liquid	93	1585	33	80	Non-classified	SC-3	LC	25	weld neck flange R182-F304/304L	Class 150	316 SS	316 SS	GRAPHITE	316 SS	SS	
KO	831	120	SG	15	Globe Valve	ENS-FDP-PID-24003	Sampling Point S02	KOH Solution	Liquid	93	1585	45	230	Non-classified	SC-3	NC	15	rd hub BS1560 P FCS A105	Class 150	316 SS	316 SS	API 600	316 SS	SS	
WD	831	121	CB	50	Ball Valve	ENS-FDP-PID-24003	50-831-WPCP-066	Process Water	Liquid	93	1795	Amb	600	Non-classified	Non-classified	NC	50	weld neck flange ASTM A105 ASME	Class 150	CS	316 SS	GRAPHITE	316 SS	CS	
WD	831	122	CB	40	Ball Valve	ENS-FDP-PID-24003	40-832-WDVP-070	Demineralized Water	Liquid	93	1585	30	520	Non-classified	SC-3	NC	40	weld neck flange R182-F304/304L	Class 150	316 SS	316 SS	GRAPHITE	316 SS	316 SS	
WD	831	123	SB	40	Ball Valve	ENS-FDP-PID-24003	40-831-WDVP-071	Demineralized Water	Liquid	93	1585	40	520	Non-classified	SC-3	NC	40	weld neck flange R182-F304/304L	Class 150	CS	316 SS	GRAPHITE	316 SS	CS	
KO	831	124	SB	25	Ball Valve	ENS-FDP-PID-24003	25-831-KOVP-078	Spent Scrubbing Solution	Liquid	93	1585	Amb	25	SC-3	SC-2	NC	25	weld neck flange R182-F304/304L	Class 150	316 SS	316 SS	GRAPHITE	316 SS	SS	
KO	831	125	SB	25	Ball Valve	ENS-FDP-PID-24003	25-831-KOVP-068	KOH Solution	Liquid	93	1585	45	80	Non-classified	SC-3	NC	25	weld neck flange R182-F304/304L	Class 150	316 SS	316 SS	GRAPHITE	316 SS	SS	
KO	831	126	SB	25	Ball																				

Notes

1) Valve size to be determined and valve to be specified during design of HVAC System.

2) SCRUBBING SOLUTION: The scrubbing process will commence with aqueous solution of 30% (w/w) KOH. However, the composition of the scrubbing solution will change over time due to the chemical reactions taking place in the scrubber. The scrubbing process is divided into three phases. During the first phase, KOH will start decreasing, while KF and K_2CO_3 will start forming. At the end of this phase, the composition (w/w) of the scrubbing solution will be 66.81% water, 11.012% KF, 22.165% K_2CO_3 and approximately 13 ppm UO_3 . At the end of the next phase, the solution composition will be 68.04% water, 16.62% KF, 15.27% $KHCO_3$ and approximately 19 ppm UO_3 . At the end of the final phase, the composition will be 68.95% water, 18.30% KF, 12.729% $KHCO_3$ and approximately 21 ppm UO_3 . At this point, the solution will be considered to be spent and will be replaced with a fresh batch of aqueous 30% KOH

3) PROCESS GAS: The process gas composition (w/w) is approximately 53.6% CO_2 , 28.7% HF, 0.78% H_2O , 5.86% O_2 , 10.89% N_2 and 0.14% UF_6 .

4) SPENT SCRUBBING SOLUTION: The spent scrubbing solution composition (w/w) is approximately 68.95% water, 18.30% KF, 12.729% $KHCO_3$ and approximately 21 ppm UO_3 .

5) OFF-GAS: The off-gas composition will change over time due to the chemical reactions taking place in the scrubber. The scrubbing process is divided into three phases. During the first and second phases, the composition (ww) of the off-gas will be 0.32% CO₂, 0.17% HF, 34.82% O₂ and 64.69% N₂. During the final phase, the composition will be 79.05% CO₂, 0.04% HF, 7.32% O₂ and 13.59% N₂.