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<b>RFQ Number</b>	<b>NLM-QUO-26/096</b>
<b>Request for Quotation Date</b>	<b>04 June 2026</b>
<b>RFQ Closing Date</b>	<b>23 June 2026</b>
<b>RFQ Closing Time</b>	<b>17:00</b>
<b>Compulsory Site Briefing</b>	<b>Not compulsory but if more information required can be arranged</b>
<b>Contact Person</b>	<b>Thulile Sokhela</b>
<b>Quotation Validity</b>	<b>90 Days from the closing date</b>
<b>Submission Details</b>	<b>RFQ Response must be sent to: Thulile.sokhela@ntp.co.za</b>
<b>RFQ Description</b>	<b>Independent Design Verification Services Overpack Steel Container for Transport of LLW Concrete Drums</b>

Dear Service Provider

Kindly provide a quotation for goods and or services as outlined in section 3 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, technology and engineering related to the safe use of nuclear knowledge to improve our world.

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For more information on Necsa, please visit: [WWW.Necsa.co.za](http://WWW.Necsa.co.za)

## 2. Background

The South African Nuclear Energy Corporation SOC Ltd (Necsa) has developed an overpack steel container intended for the transport of Low-Level Waste (LLW) concrete drums to a licensed disposal facility.

The concrete drum itself does not fully meet the requirements of the IAEA Regulations for the Safe Transport of Radioactive Material (SSR-6). Consequently, the overpack has been designed to ensure compliance of the combined package during transportation.

A design submission has been made to the national regulator; however, the regulator has requested that Necsa provide an independent design verification report performed by a suitably qualified and experienced third party.

Necsa is therefore inviting qualified service providers to submit quotations for the provision of this service.

## 3. Scope of work


The objective of this Request for Quotation is to appoint a suitably qualified, experienced, and independent organization to undertake a comprehensive design review, technical verification, and regulatory compliance assessment of the overpack steel container developed by Necsa, specifically in support of demonstrating compliance with the requirements for an Industrial Package Type IP-2 (IP-2) as defined in the IAEA SSR-6 Regulations for the Safe Transport of Radioactive Material.

The overpack, when used in combination with the concrete drum containing Low-Level Waste (LLW), is intended to function as a compliant IP-2 package for transport. The appointed service provider shall therefore verify that the combined package configuration (overpack + concrete drum) meets all applicable IP-2 regulatory requirements.

### 3.1. **Independent Design Review and Verification**

- Perform a detailed and independent technical review of the overpack design, including all engineering drawings, calculations, and safety analyses.
- Verify that the overpack design, as part of the combined package, meets the performance requirements for IP-2 packages, particularly under:
  - Routine conditions of transport.
  - Normal conditions of transport, including minor mishaps as defined in SSR-6.
- Confirm that the design approach, analytical methods, and assumptions are consistent with accepted engineering practices and SSR-6 expectations.

### 3.2. **IP-2 Compliance Assessment of the Combined Package**

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- Assess the combined performance of the overpack and concrete drum against the specific requirements applicable to IP-2 packages, including:
  - Ability to withstand normal conditions of transport without loss or dispersal of contents
  - Adequacy of containment for Low-Level Waste
  - Structural integrity, including resistance to:
    - Drop conditions
    - Stacking loads
    - Vibration and handling stresses
  - Suitability of design for LSA (Low Specific Activity) or SCO (Surface Contaminated Objects) contents, if applicable.
- Confirm that the overpack effectively compensates for any limitations or non-compliances of the concrete drum, ensuring that the combined package satisfies IP-2 requirements.

### 3.3. Verification of Performance Under IP-2 Test Conditions

- Review and verify analyses or test evidence demonstrating compliance with IP-2 performance criteria, including:
  - Free drop tests representative of normal transport conditions
  - Stacking/compression requirements
  - Resistance to environmental and operational stresses
- Confirm that the package design prevents loss of shielding integrity or containment under these conditions.

### 3.4. Validation of Safety Case for IP-2 Classification


- Evaluate the transport safety case supporting the IP-2 classification, including:
  - Justification of content classification (e.g., LSA-III, or SCO).
  - Demonstration that radiation levels and contamination limits remain within regulatory bounds.
- Confirm that the safety case is complete, conservative, and aligned with SSR-6 requirements for IP-2 packages.

### 3.5. Identification of Non-Conformances and Recommendations

- Identify any gaps or non-conformances with respect to IP-2 requirements.
- Provide clear, technically justified recommendations for modifications or additional verification, where necessary, to achieve compliance.

### 3.6. Independent Verification Report for Regulatory Submission

- Produce a formal, structured independent verification report that:
  - Explicitly evaluates compliance against IP-2 requirements of SSR-6

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- Includes a detailed compliance matrix referencing relevant SSR-6 clauses
- Clearly states whether the combined package:
  - Meets IP-2 requirements, or
  - Requires modifications for compliance
- Ensure the report is suitable for submission to the national nuclear regulator and can withstand detailed regulatory review.

### 3.7. Assurance of Independence and Regulatory Confidence


- Provide assurance that the review has been conducted with full independence, impartiality, and technical rigor, thereby strengthening regulatory confidence in the IP-2 classification and overall safety of the package design.

### 4. Attachments

Ref #	DOCUMENT NAME	DESCRIPTION
01	MES-CIV-REP-0040 Rev. 2	Detail Design Report for NLM Overpack
02	NM-17880-REP-0001 Rev. 1	Pecron Cask Overpack Concept Design
03	NNDD-IP2TRANS-M-115 Rev. 1 SHT 1 OF 7	Overpack Pecron Container

#### NOTES:

1. NDA needs to be signed first before issuing attachments
2. Interim progress updates to be provided on weekly.

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#### 4. 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.
- Pre-payment will not be accepted.

#### 5. Evaluation

##### 5.1. Phase 1 Administrative compliance

Bids will first be evaluated for compliance with mandatory administrative requirements. Failure to meet these requirements will result in disqualification.

Mandatory Documents:

- 2 x ECSA registered team members (Provide copy of Certification or PR number)
- Valid Tax Clearance Status (TCS) PIN
- Registration on the Central Supplier Database (CSD)
- Completed and signed SBD forms (SBD, 4.)
- Declaration of Interest and Independence
- B-BBEE certificate or sworn affidavit

##### 5.2. Phase 2- 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.

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.

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**NOTE: ONLY INFORMATION PROVIDED BY THE SUPPLIER RELATING TO THE SUPPLY OF INDEPENDENT DESIGN VERIFICATION SERVICES WILL BE CONSIDERED IN THIS EVALUATION.**

Item	Requirement	Weight	Points	Criteria
1	Experience and track record in nuclear transport/package design review)	25	25	Extensive experience with IP-2/IP-3/Type A and regulatory submissions
			20	Multiple similar projects, including SSR-6 work
			15	Some relevant projects (1–2 nuclear transport reviews)
			10	Limited experience, no direct IP-2 work
			0	No relevant experience
	Technical approach and methodology (SSR-6 IP-2 alignment)	25	25	Comprehensive, audit-ready approach aligned to SSR-6 clauses and IP-2 performance testing
			20	Detailed methodology with compliance matrix
			15	Basic structured approach
			10	Generic approach, not aligned to SSR-6
			0	No clear methodology
	Knowledge of SSR-6 and IP-2 requirements	15	15	Expert knowledge, including IP-2 testing and regulatory application
			10	General understanding of SSR-6
			0	No demonstrated knowledge

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Item	Requirement	Weight	Points	Criteria
	Personnel qualifications and competence	15	15	10 or more years Nuclear/Relevant project experience (at least 1 team member)
			10	5 to 9 years Nuclear/Relevant project experience (at least 1 team member)
			5	Less than 5 year Nuclear/Relevant project experience
	Independence and impartiality	10	10	Fully independent with clearly documented declaration of no conflict of interest. (NNR confidence)
			0	Conflict of interest exist
3	Quality assurance and reporting capability	10	10	ISO-aligned QA and proven regulatory reporting capability
			5	Basic QA
			0	No QA system
<b>Total</b>		<b>100</b>		

**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.**

### 5.3. Phase 3 - 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

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<b>SPECIFIC GOALS ( B-BBEE status level)</b>	<b>20</b>
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

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

#### 6. Required Documentation

- **Tax Clearance Certificate (Tax pin issued by SARS)**
- **Declaration of interest (SBD 4)**
- **Registration on the Central Supplier Database (CSD)**
- **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**

#### 7. Important

- 7.1. Quotation must be submitted on or before the RFQ closing date and time stated above.
- 7.2. 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.
- 7.3. 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

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- 7.4. 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.
- 7.5. 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.
- 7.6. 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.
- 7.7. No goods and/or services should be delivered to Necsa without an official Necsa Purchase order.
- 7.8. 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.
- 7.9. 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
- 7.10. 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