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| <h1>NECSA</h1> <p><i>Pelindaba Enterprises – a division of Necsca</i></p> <p><i>This document is the property of Necsca and shall not be used, reproduced, transmitted or disclosed without prior written permission</i></p> | |  |
| Doc. No. PEL-2019-RFI-0001 | Rev. 1 | |
| SECURITY CLASSIFICATION: OPEN | | |


| REQUEST FOR INFORMATION (RFI) | |
|-------------------------------|---|
| RFI NUMBER | PEL-2019-RFI-0001 |
| RFI TITLE | SEC PIPING PROJECT – REMOVAL AND INSTALLATION SUPPORT SERVICES |

Interested parties are invited to participate in this RFI to provide support services for the removal and replacement of the SEC Piping Spool Pieces, as part of the SEC Piping Project.

IMPORTANT DATES

| Action | Due date |
|--------------------------------------|-------------|
| RFI Issue date | 16 Apr 2019 |
| E-mail Acknowledgement form | 30 Apr 2019 |
| RFI Clarification meeting RSVP | 10 May 2019 |
| Site Walk Down at KOUBERG | 20 May 2019 |
| RFI Clarification meeting at KOUBERG | 21 May 2019 |
| Clarifications closing date | 07 Jun 2019 |
| RFI Closing date | 13 Jun 2019 |

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| Name | Designation/Capacity | Signature | Date |
|------|----------------------|-----------|------|
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IMPORTANT INFORMATION

| | |
|----------------------------------|--|
| ENQUIRES | Mr. Buyani Nsibande or E-Mail – buyani.nsibande@necsa.co.za Tel: +27 (0) 12 305 6072 |
| DELIVERY ADDRESS | PROPOSALS MAY BE DEPOSITED IN THE BID BOX SITUATED AT: Necsa Gate 3 R104 Elias Motsoaledi Street (Church Street West Ext) Pelindaba Brits Magisterial District Madibeng Municipality North West 0240 |
| SITE WALK DOWN | 20 th of May 2019 at 09h00 Meet at Eskom Koeberg |
| RFI CLARIFICATION MEETING | Please attend the compulsory clarification meeting on: 21 st of May 2019 at 10h00 Venue: Eskom – Koeberg |




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1. INTRODUCTION

1.1. Company Overview

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.

Necsa's primary function is to perform research and development within the nuclear sector, with a strong focus at nuclear technology applications particularly related to medical isotope production, applied uranium chemistry and all aspects related to the nuclear fuel cycle, including nuclear waste decommissioning and disposal.

Necsa engages in commercial business mainly through its Pelindaba Enterprises Division, which also has the capability to provide nuclear engineering and manufacturing services to the nuclear industry. Necsa is currently the only organisation in Africa, which has an ASME III (N-Stamp) certificate, which is required for the fabrication of nuclear components. Its Nuclear Manufacturing Department also hold the following certifications:


- ISO 9001
- ASME VIII – U Stamp
- ASME III – (NPT, NS and NA)
- ASME CMO (Certified Material Organisation)
- EN 13445
- API 650
- PD 5500
- ISO 3834

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

Necsa is a proudly South African company, continuously striving and succeeding in many aspects to be at the edge of science, technology and engineering and the safe use of nuclear technology to improve our world.

1.2. Overview of the Request for Information

Necsa has been contracted by Eskom for the fabrication and supply of the SEC Piping Spool Pieces, with the intention to also remove and replace the existing SEC Piping Spool Pieces.

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The Essential Services Water System (SEC) delivers seawater to four Nuclear Island Component Cooling (RRI) heat exchangers via two SEC piping trains per unit.

The purpose of the Request for Information is to identify suitable and capable companies, located in the Western Cape to provide various support services to Necsa on the SEC Piping Removal and Installation Project.

It is important for Necsa to understand the market in so as to leverage existing local capabilities and to evaluate the potential, with the intention to at a later stage approach the market through a closed RFQ process, for the same defined scope of work.

Necsa is therefore interested in your **capabilities** and **indicative costing** related to the defined scope of work.

No scope or service is too small/ large for this RFI and Necsa encourages you to tell us about your company and how you can support Necsa in this initiative.

1.3. Disclaimer

The South African Nuclear Energy Corporation SOC Limited (“Necsa”) invites you to submit information regarding the title stated on the cover sheet. Necsa would like to analyse the market’s ability to supply the above requirements.


Please note that this RFI is not a formal enquiry but an information gathering exercise only and may not lead to a competitive process. Respondents, through their response to this RFI will gain a right to participate in the next closed RFQ stage of the procurement process, should approval be granted to proceed with the procurement process.

Non-participation in this RFI process will exclude you from further participation in subsequent procurement processes and engagements with Necsa regarding this project.


Necsa has delegated the responsibility for this Request for Information enquiry to:

Mr. Buyani Nsibande
Necsa Supply Chain Management
Tel: 012 305 6072

All queries must be addressed to:
buyani.nsibande@necsa.co.za

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We look forward to receive your response.

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2. ABBREVIATIONS AND DEFINITIONS

2.1. Abbreviations

| | |
|----------|---|
| ALARA | As low as Reasonably Allowed |
| CIDB | Construction Industry Development Board |
| FFD | Fitness for Duty |
| FME | Failure Mode and Effect |
| KNNP | Koeberg Nuclear Power Plant |
| KOU | Koeberg Operating Unit |
| Necsa | South Africa Nuclear Energy Corporation |
| Necsa NM | Necsa Nuclear Manufacturing a department of Necsa |
| NNR | National Nuclear Regulator |
| QCP | Quality Control Plan |
| SEC | Essential Services Water System at Eskom's KNPP |
| SHE | Safety, Health and Environment |
| SHEQ | Safety, Health, Environment and Quality |
| SOC | State owned Company |
| RFI | Request for Information |
| RFQ | Request for Quotation |

2.2. Definitions


| | |
|-----------|--|
| Logistics | The term "Logistics" is defined as all activities that needs to be performed in order to ensure that the right people, equipped with the correct tools, material and equipment are at the right place and time to execute the planned work |
|-----------|--|

3. SCOPE OF WORK

3.1. Project Background

In February 2017 Eskom KOU approached Necsa as the preferred supplier for the material procurement, manufacturing, testing and delivery of the essential cooling water system, (SEC) piping system at the Koeberg Nuclear Power Plant (KNPP). Eskom and Necsa have signed a contract in March 2017 and the project is currently in the process of being executed.

Eskom has now also approached Necsa for the removal, installation and commissioning scope of work.

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3.2. System Description of the existing design

The Essential Service Water System (SEC) delivers seawater to four Nuclear Island Component Cooling (RRI) heat exchangers via two piping trains per unit. Heat from various sources on the nuclear island is transferred to RRI cooling water, transported to the RRI/SEC heat exchangers (1/2 RRI 001 & 002 RF), transferred to SEC cooling water via the heat exchanger surfaces and finally discarded to the ultimate heat sink - the sea.


Sections of the SEC piping system are currently manufactured from carbon steel internally lined with Butyl 5073 rubber to provide corrosion resistance against seawater. These pipe sections include the gimbal joints connecting the SEC system onto the nuclear raft, as well as piping in the SEC/RRI heat exchanger rooms.

The SEC rubber lined piping is manufactured from 24" ND schedule 20 carbon steel with a 6mm internal rubber layer. The design code applicable to the pipe sections is ASME III Division 1 - Subsection ND (2007 Edition with 2008a Addenda) [36], with an associated seismic class 1 classification [18].

3.3. Problems with the existing design

Various pinhole leaks have occurred on SEC pipe sections as documented in the feasibility study, resulting in short duration outages. These leaks can generally be attributed to rubber liner failure at spool joints, allowing seawater to come into contact with the base metal of the pipe.

The rubber lined pipes are required to be inspected during refuelling outages. The time required to perform these internal inspections is typically four days per train. These inspections entail the removal of certain elbows and spool pieces to facilitate visual inspection of the interior rubber lining. The removal and reinstallation process sometimes causes damage to the rubber lining of the flanges. Any adhesive repairs to the rubber lining are required to cure for 12 hours after application, resulting in possible outage delays. The internal inspections will prove to be challenging to perform in future refuelling outages, as there is a drive to reduce outage duration.

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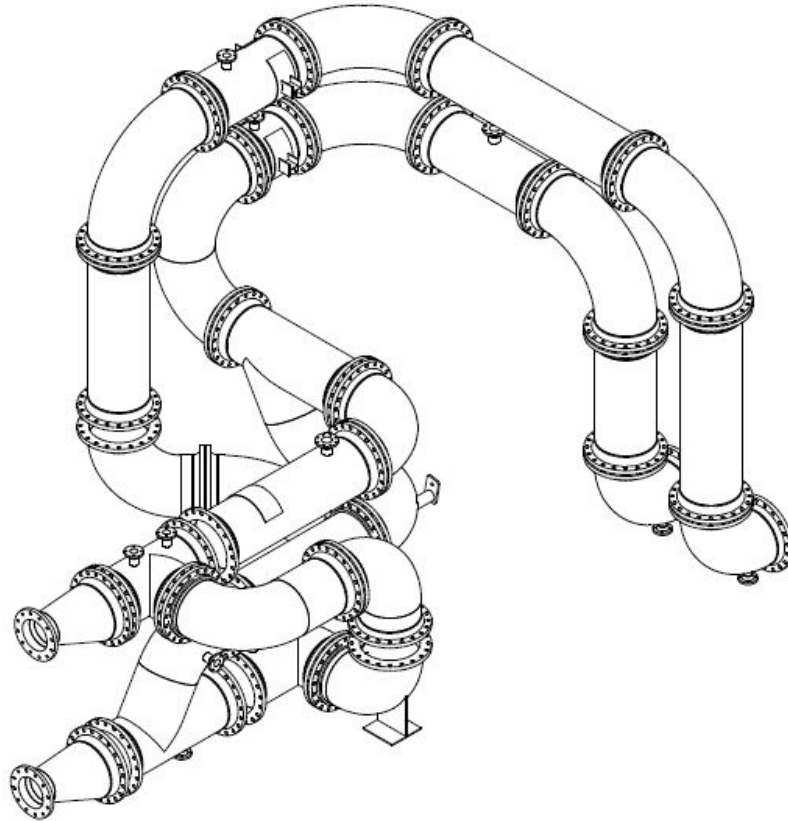


Figure 1: Schematic Layout of Unit 1, Train A


3.4. The new design

All rubber lined carbon steel sections on the SEC system are to be replaced with similar sections manufactured from AL-6XN super austenitic 6% Mo stainless steel. This material has excellent corrosion resistance in a marine environment and will provide a service life in excess of 49 years with minimal maintenance interventions required.

The piping sections would not have to be dismantled for maintenance basis inspection requirements as significant degradation such as wall loss due to erosion/corrosion is not expected over the design life. Online wall thickness measurements are possible, should it be required to verify wall thickness.

3.5. Project Scope of Work

Necsa's scope of supply comprises of the following activities:

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- a) Manufacturing and supply of the SEC Pipe Spool Pieces based on Necsa detail fabrication drawings and specifications, which in turn are based on Eskom's design of the system, accepted by the NNR.
- b) Removal of the existing rubber lined piping located in NPS rooms, N 011, N 013, N 021 and N 023 (housing the RRI heat exchangers)
- c) Removal of the existing SEC gimbal joint vertical risers (3 sections per riser, 4 risers per unit).
- d) Removal, cleaning and safe storage of all equipment that is to be re-used (e.g. valves, bolting, mussel traps, heat exchangers, support, bellows, etc.) Any as-found defects on equipment to be re-used are to be reported immediately to the Eskom project manager.
- e) Transport of the redundant rubber lined piping to the Koeberg NPS conventional waste scrapyard.
- f) The compilation of detail manufacturing and installation drawings.
- g) Verification that the new piping system shall fit within the existing plant.
- h) Compilation of detail installation SWPs and QCPs, which shall be reviewed by Eskom.
- i) Cold commissioning and testing of the replacement piping system.
- j) Correction of defects.
- k) The supply of as-built drawings.
- l) The supply of all fabrication and installation documents.

3.6. Removal, Installation and Commissioning

The removal and installation work will take place during an outage. The limited time allocated for installation will require the development of a detail installation plan as well as the possible design and manufacturing of handling tools to support removal and installation.

Rigging personnel will be trained beforehand as radiation-workers. These persons will be used for rigging activities in the NAB building, which is a radio-active controlled area.

The currently installed roof anchors will be used together with specialist rigging equipment in order to speed up removal. To this extent all available hooks must be certified prior to the commencement of the dismantling process.

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Removal of the pipes will require the current pipe supports to be cut and modified, without damaging the concrete and imbedded plates. The same supports will be re-used and fitted with new cross members if required.

Floors will be covered with rubber mats to protect surfaces from damage during the removal and installation.

The instrumentation and cable trays on the left hand part of the rooms will have to be removed prior to the start of the removal process. These areas will be used for the movement of the various pipe sections.

The old pipes will be transported by flatbed to the Koeberg waste scrap-yard and off-loaded.

Installation will require site welds. Welding will be performed by hand as the large bore; thin wall pipes are not conducive to automated welding. Eskom's technical specifications require that welding activities can only be performed by Necsa NM.

All site welds will be dye penetrant inspected.


The following existing equipment shall be re-used; Valves, mussel traps, heat exchanger, supports and gimbal joint bellows. (Note some boxed supports will need to be cut, re-welded and re-qualified). The Contractor is not responsible for the replacement or repair to damaged existing equipment, unless such damage was caused by the Contractor. The Contractor is responsible for procuring and provision of all gasket materials. The Contractor is responsible for adequate mechanical insulation of components to prevent galvanic corrosion. The N08367 (AL-6XN®) alloy piping shall be cleaned and passivated in accordance with good industry practice. The Contractor shall ensure that no contact of the AL-6XN piping with any carbon steel components (Such as flanges and supports)

The system will be hydro-pressure tested after installation.


After installation the system will be commissioned by Eskom.

The work shall be executed complying with all relevant KOU procedures and standards applicable to plant and personnel. The following Eskom KOU procedures are particularly relevant to this project:


| Item | Reference No | Reference Description |
|------|--------------|---|
| 1. | N.PSZ 45-698 | Engineering Drawing Office and Engineering Documentation Standard |

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| 2. | OHSA No 85/93 | Occupational Health and Safety Act No 85 of 1993 |
| 3. | ASME NQA-1 | Quality Assurance Requirements for Nuclear Facility Applications |
| 4. | ASME III | Boiler and Pressure Vessel Code Section III Division 1 Subsection ND, 2007 Edition with 2008a Addenda |
| 5. | SANS 9001 | Quality Management Systems – Requirements. |
| 6. | SANS 347:2012 | Categorization and conformity assessment criteria for all pressure equipment |
| 7. | NNR RD-0034 | Quality & Safety Management Requirements for Nuclear Installations |
| 8. | NNR PP-0012 | Manufacturing of Components for Nuclear Installations |
| 9. | KAA-501 | Project Management Process for Koeberg NPS Modifications |
| 10. | KAA-815 | Design Changes to Plant. Plant Structures or Operating Parameters |
| 11. | ISIPRM | In Service Inspection Programme |
| 12. | KSA-031 | Standard for the Repair / Replacement of Installed Mechanical Components |
| 13. | KAM-038 | Process for Repair / Replacement of Installed Mechanical Components |
| 14. | KAA-751 | The Control of Chemical Products at Koeberg NPS |
| 15. | KSA-132 | Lifting & Rigging Program |
| 16. | KSA-089 | Procurement Quality Engineering Requirements |
| 17. | KLA-023 | Outage Preparation Milestone Check List |
| 18. | KFU-PE-008 | Plant Handover Certificate |
| 19. | KFU-PE-007 | Project Finalisation Certificate |
| 20. | KFA-035 | Design Change Package Implementation Approval Form |
| 21. | KFA-006 | Testing Procedure for Plant Modifications |
| 22. | KFA-002 | Project Engineering Work Plan Form |

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| 23. | KAA-733 | Monitoring of the Receipt Inspection Processes |
| 24. | KAA-641 | Control and Receipt of Materials |
| 25. | 239-QWR-011 | Receipt Inspection |
| 26. | 239-QGP-002 | Generating SAP Notifications, Work Orders, Permit to Work and Updating Modification History Records |
| 27. | 239-QWA-022 | Compiling a Modification Quality Assurance Data Package |
| 28. | KAA-560 | The Control of Plant Documents as a Result of a Plant Design Change, Plant Anomaly, or Document Anomaly |
| 29. | KAA-751 | The Control of Chemical Products at Koeberg NPS |
| 30. | KSA-132 | Lifting & Rigging Program |
| 31. | KSA-089 | Procurement Quality Engineering Requirements |
| 32. | KLA-023 | Outage Preparation Milestone Check List |
| 33. | KFU-PE-008 | Plant Handover Certificate |
| 34. | KFU-PE-007 | Project Finalisation Certificate |
| 35. | KFA-035 | Design Change Package Implementation Approval Form |
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| 43. | KAA-560 | The Control of Plant Documents as a Result of a Plant Design Change, Plant Anomaly, or Document Anomaly |

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| 44. | KNM-001 | Maintenance Welding Programme |
| 45. | KAA-868 | Process & Responsibilities for Approving NDT Activities within the Nuclear Division |
| 46. | KSA 037 | Qualification & Certification Requirements for Personnel Performing NDT at the Nuclear Portfolio |
| 47. | KWM-MW-WEL-005 | Storage, Handling, Control and Preservation of Stainless Steel |
| 48. | KSM-020 | Post Maintenance Requalification Testing |

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3.7. Quality Assurance Requirements

The Contractor and Sub-Contractors shall be qualified according to Eskom Koeberg Contractor Qualification Standards, compliant to ASME NQA-1 requirements and certified to ISO9001:2015.

In accordance with Eskom's KGA-003 procedure, the service classification for the specified work scope is Q2. This is due to the fact that QA actions and special controls are required for the fabrication and installation of the new piping.

The requirements of Eskom's procedure 238-102 – Quality Management Requirements for Nuclear Suppliers will be applicable for the works.


3.8. Sub-contracted Scope of Work

It is Necsa's intention to sub-contract the following activities, either as a single scope of work or split up in various scopes of work, depending on the feedback received from the market on this RFI:

3.8.1. Compile a Work Execution File per Unit for the removal and installation of the SEC Piping Systems and the Gimbals. The work execution file must be compiled and approved by Eskom (KOU) prior to the start of the outage. The work execution file must contain all the information required by Eskom as defined in its applicable procedures referenced in its scope of work documents. The sub-contractor must identify the content of the work execution file and compile or assist Necsa and other sub-contractors to compile the necessary documents to make up the content of the work execution file. Each Unit will have its own work execution file.

A typical work execution file will consist of the following documents as a minimum:


- Risk assessments (SHE and Plant)
- Detail removal and installation plan
- Installation sequence drawings (Compiled by Necsa)
- Detail removal and installation instructions
- Welding procedures for site welds (Compiled by Necsa)
- Project Quality Management Plan (PQMP)
- Project Safety Plan
- Project Management Plan
- Installation QCPs per Unit
- Sub-contractor's QCPs
- Permits
- Isolation plan
- Rigging plan
- Fall protection plan
- FME Plans

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- Testing and commissioning plan (Compiled by Necsa)
- ALARA Assessments (Compiled by Necsa)
- Project management plan and schedule
- Personnel security vetting (Performed by Necsa)
- Personnel medical assessment (Performed by Necsa)
- Personnel training records
- Site establishment / laydown plan
- CIDB Certificate Level 7 (Provided by Necsa)
- Demonstrate compliance to KOU's FFD requirements
- Foreign material exclusion plan
- Man job specifications
- Electrical Compliance Certificates (CoC) for all electrical equipment
- Calibration certificates
- SHEQ file
- Etc.

3.8.2. Provide day-to day construction supervision and construction support services for the physical removal, installation and commissioning project, which will include:

- Detail daily construction supervision services, 24 hours, 7 days per week for the duration of the project. It can be assumed that the work will be performed in two or three shifts.
- A detailed daily report on planned events, successes, failures, risks and lessons learnt.
- The recruitment and screening of local resources for Necsa to appoint on a contract basis for the duration of the removal and installation project.
- The logistics to arrange induction and other training required to perform the work
- The logistics to arrange indoctrination and training on the detail removal and installation work instructions
- The logistic is to ensure the resources comply with Eskom's FFD requirements
- The logistics to arrange personnel access to the KOU site and work areas, complying with all KOU requirements
- The logistics to arrange lock-outs and permits in order for the construction teams to perform the removal and installation work
- The logistics to arrange access for tools and equipment to the work areas
- The logistics to arrange access for personnel and equipment in order to do site-establishment
- The logistics to arrange access and clear pathways for material and equipment to get to the work areas and the removal of used and scrape components.
- The logistics to arrange access and clear pathways for used and scrape components to be removed from the work areas to the dedicated storage areas.
- Daily pre- and post- working briefings and associated administration
- The logistics required (Permits, Lock-outs removals, approvals, Etc.) to recommission the system after cold commissioning is complete.

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3.8.3. Rigging and scaffolding services, this will include:

- Compile detail rigging plan for the complete project.
- Compile daily rigging plans for the day's work.
- The physical erection of scaffolding as required or to get Eskom's appointed scaffolding company to do the erection
- Supply and training of certified riggers
- Removal of concrete slabs to get access to the various rooms
- Get approval for the erected scaffolding so that construction work can commence
- The installation of rigging equipment to support the detail removal and installation work plan
- Issue load test certificates
- Issue certificates for all rigging equipment, including slings
- Rig-out the existing pipes after the construction team has disassembled the pipe sections one-by-one. This must be performed for all NPS Rooms N011, N013, N021, M023 and the Gimbals (4 risers per units). The expected maximum weight per spool piece is 1 ton
- Removal of exiting pipes and other equipment to the dedicated storage areas or workshops
- Transport of new pipe spool pieces to the assemble points
- Rig-in new pipes and support assembly activities
- Compile all documents required for providing the rigging services
- Provide all rigging resources required to perform the rigging work, including supervisors and safety officer per shift.


3.8.4. Removal, installation and commissioning of all electrical and instrumentation work associated with the removal and installation of both the SEC Piping spool pieces and the Gimbals for both Koeberg Units. These include but are not limited to:

- The removal and reinstallation of all cables and cable trays which must be removed in order to create space for the rigging-out and -in of the spool pieces.
- The obtaining approval for system lock-outs and permits
- Obtain electrical compliance certificates for electrical equipment used during the removal and installation work
- Issue an Certificate of Compliance (CoC) for the reinstalled scope of work
- Compile all documents required for performing the removal and installation work
- Provide all resources required to perform the removal and installation work, including a supervisor and a safety officer.

3.9. Project Schedule

3.9.1. Unit 1

The removal and installation of the SEC Spool Pieces and Gimbals for Unit 1 will take place during outage 125, which is currently planned from 23 Feb 2021 until 27 Apr 2021. The work will start with Train A of Unit 1 and once recommissioned, the work on Train B of

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Unit 1 will commence. Both trains must be completed during the outage. The KNPP cannot start up if both trains are not functional.


3.9.2. Unit 2

The removal and installation of the SEC Spool Pieces and Gimbals for Unit 2 will take place during outage 225, which is currently planned from 25 Sep 2021 until 27 Nov 2021. The work will start with Train A of Unit 2 and once recommissioned, the work on Train B of Unit 2 will commence. Both trains must be completed during the outage. The KNPP cannot start up if both trains are not functional.

3.10. Eskom's Responsibilities

Eskom will be responsible for the following:

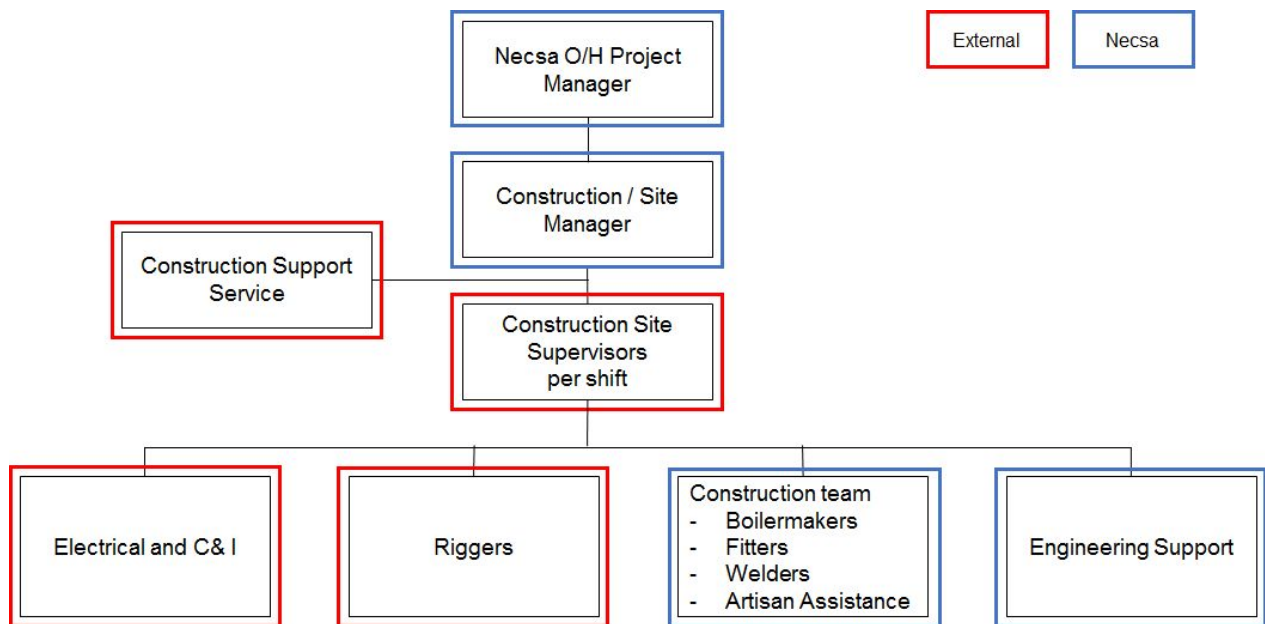
1. Eskom shall provide a design in accordance with Koeberg NPS procedure KAA-815. This design shall include:
 - a. Layout isometrics for the replacement piping of Koeberg NPS units 1 & 2 SEC trains A & B.
 - b. Stress analysis for the replacement piping.
 - c. Specifications for the replacement piping.
 - d. Documentation updates for the replacement piping.
 - e. KAA-709 safety evaluation process for the design.
2. Eskom shall be responsible for all NNR licensing activities. Any additional work from the contractor for licensing support shall be considered outside of the scope of this specification.
3. Eskom shall make the Koeberg documentation system available to the contractor. Eskom shall only make available existing documentation clerks for documentation searches. The contractor shall identify and collect all required documentation.
4. Eskom shall be responsible for compiling the modification Safety Case and any associated KAA-709 documents, and for presenting these documents to KORC and KOSC for approval.
5. Eskom shall be responsible for refurbishment and corrosion protection of existing equipment that is to be re-used.
6. Eskom shall update layout isometric drawings to as-built status based on the input from the Contractor.

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7. Eskom shall process any required Design Field Changes.
8. Eskom shall declassify the NAB corridor for purposes of rigging the new piping in and the old piping out. The rigging work shall be performed by radworkers.
9. Eskom shall provide VT-3 (mechanical visual inspection of supports) and final VT-2 (system leak check) requalification personnel.
10. Eskom shall provide site training requirements such as Plant Access Training, Radworkers, and Working at Heights etc.
11. Eskom shall update the design and isometric drawings to as-built status.

3.11. Project Organisation

The following project organisation structure is foreseen for the execution of the SEC Piping Removal and Installation Project:



Project Organisation Structure

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4. INSTRUCTION TO RESPONDENTS

4.1. General

4.1.1. Respondents must familiarise themselves with and comply with the mandatory requirements and ensure their availability for site visits and possible presentations, as required, on the appropriate dates.

4.2. Respondent's Information

4.2.1. The required information of the respondent must be completed as stipulated in Appendix A. Failure to do so may result in disqualification.

4.2.2. Respondents to provide solvency statement signed by a qualified authority that the financial position of the respondent is sound and that the company will be able to mobilise the required resources for the execution of this project.

4.2.3. Confirm that staff possesses the relevant qualifications to undertake the duties effectively and safely.


4.2.4. The successful respondent shall deploy competent staff, supervision and labour who are appropriately experienced and trained for the work they are to undertake.

4.2.5. Necsa and its representatives may seek formal assurance to this effect (including a formal supplier assessment) at any time during the evaluation period.

4.3. Consortium

4.3.1. Respondents forming part of a Consortium must submit with their proposal a copy of their Consortium Agreement / Letter of Intent in a separate attachment. This must clearly indicate:

- The form of agreement;
- The respective roles and responsibilities of the members;
- The identity of the lead company which will have the overall project responsibility;
- The name and address of the officer acting as the single point of contact for all communications between Necsa and the tenderers. He shall be fully empowered to act on behalf of all members; and
- The member's confirm that they are willing to be jointly and severally liable to Necsa for the performance of the project.

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4.4. Sub-contracting

4.4.1. Respondents must detail any work to be sub-contracted, and the proposed sub-contractor(s) to be used.

4.4.2. Necsa reserves the right to reject the use of any of the respondent's proposed subcontractors.

4.4.3. Respondents are advised that Necsa will not respond to any direct approach from potential sub-contractors for details in respect of any particular item in this RFI.

4.5. Necsa's Bidding Rights


4.5.1. Necsa reserves the right to:

- Extend the closing date;
- Verify any information contained in a proposal;
- Request documentary proof regarding any proposal issues;
- Give preference to locally manufactured goods or locally sourced services;
- Issue follow-up or supplementary questions during the response period or after receipt of proposals;
- Make known to all respondents any questions submitted by a respondent including commercial and technical clarifications, together with the answers given to any individual respondent, if it is considered to be relevant to the RFI; and
- Cancel or withdraw this RFI as a whole or in part.

4.5.2. As part of the evaluation process NECSA may require respondents to arrange and/or participate in one or more of the following:

- Interviews with, or written references from, nominated reference;
- Reference site visits to the location(s) of nominated reference;
- Interviews with respondent's personnel who would be involved in the contract execution (day-to-day operations of the site);

4.5.3. Negotiations with the respondents.

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4.6. Bidding Process

- 4.6.1. Respondents must confirm their intention to respond by completing the attached form (Appendix B) and returning it to the Necsa Contact Person for this RFI via email provided.
- 4.6.2. Respondents must familiarise themselves with and comply with the bidding timetable and ensure their availability for the site visit and presentations, as required, on the appropriate dates. Necsa is not able to offer any flexibility to this timetable.
- 4.6.3. Respondents are required to:
- Respond in the English language;
 - A cover letter on the respondents company letterhead with clear reference to the RFI of interest should accompany both the technical and pricing proposals;
 - Ensure that all documents attachments are clearly marked and bound in a clear, logical and well-marked format with a table on context ensuring ease of finding individual documents or sections; and
 - The original document must be signed in black ink by an authorised person, agent or representative.
- 4.6.4. All cost estimations and information must be typed by the respondent, no hand written costing/pricing will be accepted.
- 4.6.5. All proposals in this regard shall be accepted if they have been placed in the tender box by the closing date stipulated. **Late submissions will not be considered.**

4.7. Timetable


The important dates and deadlines related to this RFI are shown on the title page of this RFI.

4.8. Acknowledgement of Receipt and willingness to participate

Respondents are required to submit an acknowledgement of receipt and willingness to participate form, upon receipt of the RFI. This is compulsory and the template for the acknowledgement of receipt can be found in Appendix B.

4.9. Clarification Meeting

A site clarification meeting with representatives of the Employer will take place as defined in Table - **“IMPORTANT INFORMATION”** on page 3 of this RFI

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Note a RSVP needs to be submitted to scm@necsa.co.za by no later than the 10th of May 2019. Please see Appendix C for the template. The subject of the RSVP e-mail should be in the following format:

- **PEL2019RFI0001_RSVP_InsertCompanyName**

4.10. Clarifications

Clarifications or queries can be submitted to scm@necsa.co.za throughout the duration of the RFI enquiry until 07 June 2019.

The subject for all clarification and/or query e-mails should be in the following format:

- **PEL2019RFI0001_Clarification_InsertCompanyName**

4.11. RFI Submission Requirements

4.11.1. Respondents must submit their responses and all supporting documents in properly labelled and sealed envelopes clearly marked.

Proposal Title –

The envelope must include:


two (2) hard copies (one (1) original and one (1) copy) and one (1) electronic copy (on disk or memory stick).
pulsory returnable documents must also be included in the envelope.

4.11.2. All submitted documents must be in English.

4.11.3. The electronic copies will include the **consolidated pdf submission** as well as the requested information in **active MS Word or Excel format**.

4.11.4. No proposal shall be accepted by Necsa if submitted in any manner other than as prescribed above.


4.11.5. Respondents may also send the final submissions electronically via E-Mail to scm@necsa.co.za. The limit for the e-mail size is 10MB per e-mail therefore the submission is to be made in a series of e-mails.

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4.11.6. The subject for the final submissions via e-mail should follow the format:


PEL2019RFI0001_FinalSubmission_*InsertCompanyName*_Email_*InsertNumberOfTheEmail*_of_*InsertNumberOfTotalEmails*

Example: PEL2019RFI0001_FinalSubmission_*Company ABC*_Email_1_of_10

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4.12. Important Notes


- i. This RFI is exploratory and in no way intended to conflict with current legislation or government policies.
- ii. Due to the specific need that this RFI process has to fulfil, Necsa wishes to clarify that this invitation is not intended to impede, amend or replace any current or future procurement process that Necsa has engaged in or will engage in.
- iii. Necsa reserves the right, in its absolute discretion, at any stage and without notice, to terminate further participation in the process by any Party, to select or disqualify any interested participant from further engagement, to amend and/or terminate this RFI process or any future process pursuant to this process.
- iv. This RFI is a stand-alone information-gathering and market-testing exercise, intended only to inform and assist Necsa's further deliberation to develop a procurement strategy for the project.
- v. Through the submission of a proposal, respondents will gain a right to participate in the next RFQ procurement process for this project, provided the respondent comply with the pre-qualification requirements defined in section 5 of this RFI.
- vi. Any and/or all information submitted by any and/or all respondents may be used in the development of a procurement strategy, without the necessity of acknowledging the source, and without such entity gaining any rights in respect of such strategy.
- vii. The information submitted will be treated as confidential. The intention is to gather broad and general information to inform Necsa's procurement and sub-contracting strategy.
- viii. Any information provided pursuant to this RFI process and any subsequent processes and/or engagement will be confidential and Necsa will only use the information in the course of its process of strategizing a way forward. Through making a submission, the respondent accepts the terms and conditions which governs this process.
- ix. All participants responding to this RFI process need to ensure that they have received all information and remain solely responsible for satisfying themselves as to the information required in responding hereto and are fully responsible for all costs incurred in relation hereto and under no circumstances will any resultant cost be borne by Necsa.
- x. Submissions and all copies thereof shall become the absolute property of Necsa who

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shall be entitled to copy and/or reproduce the same and to distribute the same amongst its employees and Eskom.

- xi. Any reference to time will mean South African Standard Time (SAST), i.e. GMT +2 hours. The closing time will be determined by using the Telkom time signal as available over the national telephone system in South Africa. This time will be strictly adhered to.
- xii. The following contractual conditions could be applicable during the RFQ phase of the project:

| | Description | Requirement |
|--|--|---|
| | Contracting | to-back contracting based on Eskom's final contract. The contract will be based on the SEC Suite of contracts. |
| | Payment Terms | 15 days after the receipt of an accepted invoice and statement |
| | Warranties | In accordance with Eskom's final contract with Necsa. |
| | Price adjustment for inflation | Appropriate RSA Index |
| | Insurance | |
| | Professional Indemnity Liability cover | As ever is deemed necessary for the envisaged scope of work |
| | Damage to property | As ever is deemed necessary for the envisaged scope of work and in accordance with Eskom's final contract with Necsa |
| | Death or bodily injury to employees | As prescribed by the Compensation for Occupational Injuries and Diseases Act No 130 of 1993 with a limit of indemnity of not less than R500 000.00 (five hundred thousand) in respect of each claim, without limit to the number of claims. |
| | Penalties | |
| | For indirect or consequential losses | (Zero Rand) |
| | For damage to customer's property | 10 million per event without limit to the number of events |
| | Defect due to your design | 10% of the total of the prices |
| | For all matters arising in connection with this contract | 10% of the total of the prices |
| | Delay damages | |
| | Delay damages for delivery | 1000 per day to-back contracting based on Eskom's final contract |
| | The total delay damages does not exceed | 10% of the total of the Prices to-back contracting based on Eskom's final contract |

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5. CONTENTS OF THE RFI SUBMISSION

The RFI Submission must contain the following sections with the required information as defined below;

SECTION 1: EXECUTIVE SUMMARY

In this section the respondent will give an executive summary of their proposal.

SECTION 2: COMPANY OVERVIEW, CAPABILITIES AND PREVIOUS EXPERIENCE

The purpose of Section 2 is to capture the general information related to your company to enable Necsa to have an overview of your operating structure, skills profile, demographics, financial standing, BBBEE position and very important previous experience in performing similar work and specifically work performed on the Eskom Koeberg site.


SECTION 3: SCOPE OF PROJECT

In this section the respondent will give an overview of the project scope. It is important for Necsa to get your view of understanding the project scope and the challenges and risks associated with the envisaged scope of work.

SECTION 4: PROPOSAL

The purpose of this section is to capture your proposal clearly indicating the sub-contracted scope of work you want to undertake, with an indicative breakdown of the main activities and the scheduling and costing thereof. Also reference and include any associated supporting documents in this section.


You may answer to a part of the scope or the complete scope as determined by your own supply/support capability.

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SECTION 5: PRICE BREAKDOWN (ESTIMATIONS)

The following price breakdown table must be completed for the contemplated scope of work you plan to undertake:


| Item No | Item Description | Rate | Expected Quantity | Price (ZAR) |
|----------|---|------------|---------------------|-------------|
| 1 | Research and compile individual documents required for compiling the Work Execution File per Unit | | 2 x Units | |
| 1.1 | Research and identify all requirements for compiling a Work Execution File applicable for the envisaged scope of work | R per Hour | # Hours | |
| 1.2 | SHE Risk Assessment Plan | R per doc | 4 - (One per Train) | |
| 1.3 | Plant Risk Assessment Plan | R per doc | 4 - (One per Train) | |
| 1.4 | Detail removal and installation plan | R per doc | 4 - (One per Train) | |
| 1.5 | Detail removal and installation instructions | R per doc | 4 - (One per Train) | |
| 1.6 | Project Quality Management Plan | R per doc | 2 – (One per Unit) | |
| 1.7 | Project Safety Plan | R per doc | 2 – (One per Unit) | |
| 1.8 | Project Management Plan | R per doc | 1 | |
| 1.9 | Installation QCP | R per doc | 4 - (One per Train) | |
| 1.10 | Isolation Plan | R per doc | 4 - (One per Train) | |
| 1.11 | Required Permits Plan | R per doc | 4 - (One per Train) | |
| 1.12 | Rigging Plan | R per doc | 4 - (One per Train) | |
| 1.13 | Fall Protection Plan | R per doc | 4 - (One per Train) | |
| 1.14 | FME Plans | R per doc | 2 | |
| 1.15 | Site Establishment / Laydown Plan | R per doc | 2 - (One per Unit) | |
| 1.16 | Foreign Material Exclusion Plan | R per doc | 2 - (One per Unit) | |
| 1.17 | Man Job Specifications | R per doc | # Jobs | |

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|----------|---|--------------|-----------------------|--|
| 1.18 | SHEQ File | R per File | 2 - (One per Unit) | |
| 1.19 | Etc. | R per doc | | |
| | | | | |
| | SUBTOTAL - 1 | | | |
| 2 | Compile a Work Execution File per KNPP Unit and get it approved by Eskom prior to the outage | R per File | 2 - (One per Unit) | |
| | SUBTOTAL - 2 | | | |
| 3 | Provide day-to-day Construction Site Management Services | | | |
| 3.1 | Resources for daily construction management services | | Quantity Per Train | |
| 3.1.1 | Construction / Site Manager | R per hour | # Hr | |
| 3.1.2 | Construction / Site Supervisors | R per hour | # Hr | |
| 3.1.3 | Project Coordinator | R per hour | # Hr | |
| 3.1.4 | Project Expeditor | R per hour | # Hr | |
| 3.1.5 | Project Scheduler | R per hour | # Hr | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 3.2 | Support Services per Unit – Prior to Outage | | | |
| 3.2.1 | Recruitment and screening of local resources | R per person | 100 persons | |
| 3.2.2 | Logistics to arrange induction and other training | R per person | 100 persons | |
| 3.2.3 | Logistics to arrange access for resources and tools to KOU Site | R per person | 100 persons | |
| 3.2.4 | Site establishment (Office, Stores, Workshop) | R | 2 (per Unit) | |
| | | | | |
| 3.3 | Support Services per Train – During Outage | | | |
| 3.3.1 | Logistic to arrange lock-outs and obtaining the necessary permits | R per permit | # Permits per Train | |
| 3.3.2 | Etc. | | | |
| | | | | |
| 3.4 | Support Services per Train – After Outage | | | |

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| 3.4.1 | Site clean-up | R | 2 (per Unit) | |
| 3.4.2 | Etc. | | | |
| | | | | |
| | SUBTOTAL – 3 | | | |
| 4 | Provide Rigging and Scaffolding Services | | | |
| 4.1 | Resources | | Quantity Per Train | |
| 4.1.1 | Rigger Supervisor | R per hour | # Hr | |
| 4.1.2 | Experienced Rigger | R per hour | # Hr | |
| 4.1.3 | Junior Rigger | R per hour | # Hr | |
| 4.1.4 | Assistants | R per hour | # Hr | |
| 4.1.5 | SHEQ Officer | R per hour | # Hr | |
| | | | | |
| 4.2 | Rigging Services | | | |
| 4.2.1 | Compile all documents required to perform rigging service | R per document | # Documents | |
| 4.2.2 | Provide all certificates required to perform rigging service | R per certificate | # Certificate | |
| 4.2.3 | Etc. | | | |
| | | | | |
| 4.3 | Scaffolding Services | | | |
| 4.3.1 | Compile all documents required to perform scaffolding service | R per document | # Documents | |
| 4.3.2 | Provide all certificates required for erected scaffolding | R per certificate | # Certificate | |
| 4.3.3 | Etc. | | | |
| | | | | |
| | SUBTOTAL – 4 | | | |
| 5 | Removal, Installation and Commissioning of all electrical and instrumentation work | | Quantity Per Train | |
| 5.1 | Resources | | | |
| 5.1.1 | Electrician | R per hour | # Hr | |
| 5.1.2 | Electrician Assistant | R per hour | # Hr | |
| 5.1.3 | C & I Technician | R per hour | # Hr | |
| 5.1.4 | SHEQ Officer | R per hour | # Hr | |
| | | | | |

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| 5.2 | Services | | | |
| 5.2.1 | Compile all documents required to perform Electrical and C&I Service | R per document | # Documents | |
| 5.2.2 | Provide all certificates required to perform Electrical and C&I Service | R per certificate | # Certificates | |
| 5.2.3 | Etc. | | | |
| | | | SUBTOTAL – 5 | |
| | | | PROJECT TOTAL | |

SECTION 6: PROJECT MANAGEMENT


In this section the respondent will give an overview of the project management structure it will implement to execute the project and to interact with Necsa's project management team.

SECTION 7: GENERAL FEEDBACK

The RFI has been structured to capture the supplier information such that Necsa has an overall indication/representation of the supplier's capabilities related to the entire scope of the project. However, in this section we would appreciate your feedback (that is, comments, remarks, suggestions, items you would have liked further clarification on etc.) on this RFI, to be captured.

SECTION 8: RFI COMPULSORY RETURNABLES

In this section the respondent will list all the compulsory returnable and attached it as Appendixes to the respondent's submission.

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6. ELIGIBILITY REQUIREMENTS

6.1. Pre-qualification requirements

The following pre-qualification criteria have been identified in order to compile a list of preferred suppliers to participate in the next (RFQ) stage of the procurement process:

| | Description | Requirement | No |
|--|-------------------------|--|----|
| | Company info | Respondent's company information (completed Annexure A) | |
| | | Respondent's intention to respond (completed Annexure B) | |
| | Capacity and Capability | Respondent has the capability to perform the envisaged scope of work | |
| | | Respondent has the capacity to perform the envisaged scope of work | |
| | | COIDA Certificate | |
| | Experience | Applicable experience in performing work on the Eskom Koeberg site | |
| | | CIDB Rating Certificate | |
| | Financial | Financial solvency statement | |
| | | Tax clearance Certificate | |
| | Quality | ISO 9001:2008 Certificate | |
| | | Compliance to Eskom procedure 238-102. | |
| | Content | Foreign resources to be included in project team | |
| | | Willingness of acknowledgement to use local resources residing in the Western Cape, close to Koeberg | |

Non-compliance to the following pre-qualification criteria will result in automatic disqualification.


| | | | |
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7. RETURNABLE DOCUMENTS CHECKLIST

Please indicate that all mandatory documents are included in this proposal by ticking the boxes in the checklist below. Responses received without all required documents will be considered invalid.


7.1. Mandatory Documents


- 7.1.1. Respondent's Information (Appendix A)
- 7.1.2. Respondent's signed solvency statement
- 7.1.3. Original good standing letter from SARS (Tax clearance) OR a letter from SARS with PIN number issued for TAX compliance status.
- 7.1.4. If a Consortium, Joint Venture or Sub-contractor, a valid Tax Clearance Certificate for each member.
- 7.1.5. If a Consortium, Joint Venture or Sub-contractor, a copy of the consortium agreement or letter of intent.
- 7.1.6. Compensation for Occupational Injuries and Diseases Act (COIDA).
- 7.1.7. Copy of valid ISO 9001:2008 certificate
- 7.1.8. Copy of Construction Industry Development Board (CIDB) certificate
- 7.1.9. FRI Proposal

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7.2. Content of RFI Proposal

- 7.2.1. Section 1 - Executive summary.
- 7.2.2. Section 2 - Company overview, capabilities and previous experience.
- 7.2.3. Section 3 - Scope of Project – Respondents interpretation.
- 7.2.4. Section 4 - Respondent's detail proposal.
- 7.2.5. Section 5 - Price Breakdown.
- 7.2.6. Section 6 - Project management.
- 7.2.7. Section 7 – General feedback.
- 7.2.8. Section 8 – Compulsory returnables.

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| Name of Company (2): | |
|--------------------------|--|
| Registration Number: | |
| VAT Registration Number: | |
| Contact Person: | |
| Telephone Number: | |
| Fax Number: | |
| Email Address: | |
| Postal Address: | |
| Physical Address: | |

| | | | | |
|--|-----|--------------------------|----|--------------------------|
| ARE YOU CURRENTLY REGISTERED AS A VENDOR WITH NECSA | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
|--|-----|--------------------------|----|--------------------------|


| | |
|--|--|
| IF YES, PLEASE PROVIDE YOUR VENDOR REGISTRATION NUMBER WITH NECSA | |
|--|--|

| | | | | |
|--|-----|--------------------------|----|--------------------------|
| HAS A TAX CLEARANCE AND PIN BEEN SUBMITTED? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
|--|-----|--------------------------|----|--------------------------|

| | | | | | | | | |
|--|---|---|---|---|---|---|---|---|
| IF YES, PLEASE INDICATE THE EXPIRY DATE | D | D | M | M | Y | Y | Y | Y |
|--|---|---|---|---|---|---|---|---|

| | | | | |
|---|-----|--------------------------|----|--------------------------|
| IS A VALID BBBEE CERTIFICATE BEEN SUBMITTED? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
|---|-----|--------------------------|----|--------------------------|

| | | | | | | | | |
|--|---|---|---|---|---|---|---|---|
| IF YES, PLEASE INDICATE THE EXPIRY DATE | D | D | M | M | Y | Y | Y | Y |
|--|---|---|---|---|---|---|---|---|

| | | | |
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| Name of Company (3): | |
|-----------------------------|--|
| Registration Number: | |
| VAT Registration Number: | |
| Contact Person: | |
| Telephone Number: | |
| Fax Number: | |
| Email Address: | |
| Postal Address: | |
| Physical Address: | |

| | | | | |
|--|------------|--------------------------|-----------|--------------------------|
| ARE YOU CURRENTLY REGISTERED AS A VENDOR WITH NECSA | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
|--|------------|--------------------------|-----------|--------------------------|

| | |
|--|--|
| IF YES, PLEASE PROVIDE YOUR VENDOR REGISTRATION NUMBER WITH NECSA | |
|--|--|


| | | | | |
|--|------------|--------------------------|-----------|--------------------------|
| HAS A TAX CLEARANCE AND PIN BEEN SUBMITTED? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
|--|------------|--------------------------|-----------|--------------------------|


| | | | | | | | |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| IF YES, PLEASE INDICATE THE EXPIRY DATE | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|

| | | | | |
|---|------------|--------------------------|-----------|--------------------------|
| IS A VALID BBBEE CERTIFICATE BEEN SUBMITTED? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
|---|------------|--------------------------|-----------|--------------------------|

| | | | | | | | |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| IF YES, PLEASE INDICATE THE EXPIRY DATE | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|

| | |
|---|-------------------------------|
| <p>I CERTIFY THAT THE INFORMATION PROVIDED ON THIS FORM IS TRUE AND CORRECT. I FURTHER ACCEPT THAT, IN ADDITION TO CANCELLATION OF CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.</p> | |
| <p>_____ SIGNATURE OF BIDDER (DULY AUTHORISED)</p> | <p>_____ DATE</p> |
| <p>_____ CAPACITY UNDER WHICH THIS BID IS SIGNED</p> | |

| | | | |
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APPENDIX B: ACKNOWLEDGEMENT OF RECEIPT AND PARTICIPATION

TO: NECSA - South African Nuclear Corporation Limited's *Representative*

FROM: _____

Attention: Mr. Buyani Nsibande

Sender _____

E-Mail – scm@necsa.co.za

Contact No.: _____

Email address: _____

RFI reference number: PEL-2019-RFI-0001


Confirmation of respondent to participate in Request for Information on the following project.

Project Title: _____


We are in receipt of Necsa's request for information dated _____. We confirm the following (please mark the appropriate response):

| No | Statement | Yes | No | Comments |
|----|--|-----|----|----------|
| 1 | We are interested in submitting a response in terms of Necsa's RFI process requirements | | | |
| 2 | We have noted the deadline for the RFI submission | | | |
| 3 | We intend to submit the information in the name of the organization stated above | | | |
| 4 | We would like to receive all further information and correspondence at our E-Mail address as above | | | |
| 5 | We have read and understood all the "important notices" and conditions | | | |

Yours faithfully

| | | | |
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Signed by the respondent

| | | | |
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APPENDIX C. RSVP FOR NOTICE TO ATTEND THE CLARIFICATION MEETING

Date: _____

To: Mr Buyani Nsibande (Tel – 012 305 6072)

RSVP for notice to attend the Clarification Meeting for **PEL-2019-RFI-0001**

SEC PIPING PROJECT – REMOVAL AND INSTALLATION SUPPORT SERVICES

I, hereby give notice that the persons listed below from (Insert Organisation Name), will attend the clarification meeting for the above mentioned Request for Information.

Clarification Meeting Details

Date: _____

Commence at 09:00 - 12: 00 (SA standard time)


Venue: _____

Please indicate the names of the representatives that will be attending below:

| Name | Surname | ID Number | Designation |
|------|---------|-----------|-------------|
| | | | |
| | | | |

Yours Sincerely

Name and Surname:

| | | | |
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Mobile No: _____

E-mail: _____