



NEC3 Term Service Contract (TSC3)

Between **ESKOM HOLDINGS SOC Ltd**
(Reg No. 2002/015527/30)

and [Insert at award stage]
(Reg No. _____)

for **Provision of High-Pressure Cleaning of Tubes, Eddy
Current and/or Laser Inspections on an as and when
required basis at Koeberg Operating Unit**

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CONTRACT No. [Insert at award stage]



- Q3/L3
- 238-103 applicable

PART C1: AGREEMENTS & CONTRACT DATA

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C1.1 Form of Offer & Acceptance

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

High Pressure Cleaning of Tubes, Eddy Current and/or Laser Inspections on an as and when required basis at Koeberg Operating Unit

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Options A or C	The offered total of the Prices exclusive of VAT is	R [•]
Option E	The first forecast of the total Defined Cost plus the Fee exclusive of VAT is	R [•]
	Sub total	R [•]
	Value Added Tax @ 15% is	R [•]
	The offered total of the amount due inclusive of VAT is ¹	R [•]
	(in words) [•]	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

¹ This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Service Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed and signed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)

Name(s)	Mr. Velaphi Ntuli	
Capacity	Power Station General Manager (Koeberg)	
for the Employer	Eskom Holdings SOC Ltd Koeberg Operating Unit R27 Off West Coast Road Melkbosstrand South Africa 7441	
	(Insert name and address of organisation)	

Name & signature of witness		Date	
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Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

1. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1	[•]	[•]
2	[•]	[•]
3	[•]	[•]
4	[•]	[•]
5	[•]	[•]

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:**For the Employer**

Signature

Name

Capacity

On behalf
of*(Insert name and address of organisation)*Name &
signature
of witness

Date

Power Station Manager (Koeberg)
**Eskom Holdings SOC Ltd
Koeberg Operating Unit
R27 Off West Coast Road
Melkbosstrand
South Africa
7441**

C1.2 TSC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
		A: Priced contract with price list
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation
		X2: Changes in the law
		X18: Limitation of liability
		X19: Task Order
		Z: <i>Additional conditions of contract</i>
	of the NEC3 Term Service Contract April 2013 ² (TSC3)	
10.1	The <i>Employer</i> is (name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1	The <i>Service Manager</i> is (name):	Khutso Moahloli
	Address	Koeberg Operating Unit R27 Off West Coast Road Melkbosstrand
	Tel	021 550 5149
	Fax	086 66 25947
	e-mail	Moahlokk@eskom.co.za
11.2(2)	The Affected Property is	Koeberg Operating Unit (KOU)
11.2(13)	The <i>service</i> is	The High-Pressure Cleaning of Tubes, Eddy Current and/or Laser Inspections on an as and when required basis at Koeberg Operating Unit
11.2(14)	The following matters will be included in the Risk Register	Minutes of early warning meetings and all

² Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 www.ecs.co.za

11.2(15)	The Service Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	2 (two) weeks
2	The Contractor's main responsibilities	Data required by this section of the core clauses is also provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data
21.1	The <i>Contractor</i> submits a first plan for acceptance within	2 (two) weeks of the Contract Date
3	Time	
30.1	The <i>starting date</i> is.	1 September 2024
30.1	The <i>service period</i> is	5 (five) years
4	Testing and defects	Verification of removal of all equipment is required at the end of the <i>service</i> .
5	Payment	
50.1	The <i>assessment interval</i> is	between the 25th day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand
51.2	The period within which payments are made is	30 days after receiving a valid Invoice.
51.4	The <i>interest rate</i> is	<p>the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.</p>

6	Compensation events	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
7	Use of Equipment Plant and Materials	No data required for this section of the conditions
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1. System Availability
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
10	Data for main Option clause	
A	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the service at intervals no longer than	4 (four) weeks.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i>	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (London) (see www.ice-sa.org.za) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	arbitration
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	- if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.
12	Data for secondary Option clauses	
X1	Price adjustment for inflation	All prices will remain fixed for the first 12 months of the contract period; thereafter the

		prices will be subject to one annual adjustment as per clause X1.1	
X1.1	The <i>base date</i> for indices is	May 2024.	
	The proportions used to calculate the Price Adjustment Factor are:	proportion	linked to index for
		0.85	SEIFSA Table C3
		0.15	Actual Labour Cost
		1.00	non-adjustable
X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.	
X18	Limitation of liability		
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to	R0.0 (zero Rand)	
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	the amount of the deductibles relevant to the event	
X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to	The greater of <ul style="list-style-type: none"> the total of the Prices at the Contract Date and the amounts excluded and unrecoverable from the <i>Employer's</i> insurance (other than the resulting physical damage to the <i>Employer's</i> property which is not excluded) plus the applicable deductibles 	
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> , for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	the total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for <ul style="list-style-type: none"> Defects due to his design, plan and specification, Defects due to manufacture and fabrication outside the Affected Property, loss of or damage to property (other than the <i>Employer's</i> property, Plant and Materials), death of or injury to a person and infringement of an intellectual property right. 	

X18.5	The <i>end of liability date</i> is	5 (five) years after the end of the <i>service period</i>.
X19	Task Order	
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	30 days of receiving the Task Order
Z	The <i>additional conditions of contract</i> are	Z1 to Z14 always apply.

Z1 Cession delegation and assignment

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

- Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.
- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Service.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information

which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.

Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.

Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

Z4.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.

Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Health, safety and the environment: Add to core clause 27.4

Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*:

- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Affected Property;
- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the *service*; and
- undertakes, in and about the execution of the *service*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z6.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z7 Provision of a Tax Invoice and interest. Add to core clause 51

Z7.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core

clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

- Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

- Z8.1 Delete the last paragraph of core clause 61.3 and replace with:

If the *Contractor* does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices.

Z9 Employer's limitation of liability

- Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z9.2 The *Contractor's* entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer's* liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.

Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

- Z10.1 or had a business rescue order granted against it.

Z11 Ethics

For the purposes of this Z-clause, the following definitions apply:

Affected Party	means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i> or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
Coercive Action	means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
Collusive Action	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
Committing Party	means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,
Corrupt Action	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
Fraudulent	means any unlawfully or illegally intentional act or omission that misleads, or attempts

Action to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,

Obstructive Action means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and

Prohibited Action means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z11.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.

Z11.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.

Z11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Z12 Insurance

Z 12 .1 Replace core clause 83 with the following:

Insurance cover 83

- 83.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 83.2 The *Contractor* provides the insurances stated in the Insurance Table A from the *starting date* until the earlier of Completion and the date of the termination certificate.

INSURANCE TABLE A

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance.

	The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
The <i>Contractor's</i> liability for loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Service	<p><u>Loss of or damage to property</u> The replacement cost</p> <p><u>Bodily injury to or death of a person</u> The amount required by the applicable law.</p>
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

Z 12.2 Replace core clause 86 with the following:**Insurance
by the
Employer**

86

86.1 The *Employer* provides the insurances stated in the Insurance Table B**INSURANCE TABLE B**

Insurance against or name of policy	Minimum amount of cover or minimum limit of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

Z13 Nuclear Liability

- Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa and is the holder of a nuclear licence in respect of the KNPS.
- Z13.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z14 Asbestos

For the purposes of this Z-clause, the following definitions apply:

AAIA	means approved asbestos inspection authority.
ACM	means asbestos containing materials.
AL	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
Ambient Air	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
Compliance Monitoring	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
OEL	means occupational exposure limit.
Parallel Measurements	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
Safe Levels	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
Standard	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.

SANAS means the South African National Accreditation System.

TWA means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

- Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.
- Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

C1.2 Contract Data

Part two - Data provided by the *Contractor*

Notes to a tendering contractor:

1. Please read both the both the NEC3 Term Service Contract April 2013 and the relevant parts of its Guidance Notes (TSC3-GN)³ in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The key people are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications:	

³ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 5391902 or www.ecs.co.za

Experience:

CV's (and further key person's data including
CVs) are in _____.

A	Priced contract with price list		
11.2(12)	The <i>price list</i> is in _____		
11.2(19)	The tendered total of the Prices is	R	_____
C	Target contract with price list		
11.2(12)	The <i>price list</i> is in _____		
11.2(20)	The tendered total of the Prices is	R	_____
E	Cost reimbursable contract		
11.2(12)	The <i>price list</i> is in _____		

PART 2: PRICING DATA

TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	2
C2.2	The <i>price list</i>	5

C2.1 Pricing assumptions: Option A

1. How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract (TSC3) core clauses and Option A states:

Identified and defined terms	11	
	11.2	(12) The Price List is the <i>price list</i> unless later changed in accordance with this contract.
		(17) The Price for Services Provided to Date is the total of <ul style="list-style-type: none"> the Price for each lump sum item in the Price List which the <i>Contractor</i> has completed and where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the <i>Contractor</i> has completed by the rate.
		(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

2. Function of the Price List

Clause 54.1 in Option A states: "Information in the Price List is not Service Information". This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Service in accordance with the Service Information". Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

3. Link to the *Contractor's* plan

Clause 21.4 states "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

4. Preparing the *price list*

Before preparing the *price list*, both the *Employer* and tendering contractors should read the TSC3 Guidance Notes pages 14 and 15. In an Option A contract, either Party may have entered items into the *price list* either as a process of offer and acceptance (tendering) or by negotiation depending on the nature of the *service* to be provided. Alternatively the *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in the *price list* to be prepared and priced by him.

It is assumed that in preparing or finalising the *price list* the *Contractor*:

- Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A;
- Understands the function of the Price List and how work is priced and paid for;
- Is aware of the need to link operations shown in his plan to items shown in the Price List;
- Has listed and priced items in the *price list* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate item within the Prices or rates of other listed items in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.
- Understands there is no adjustment to items priced as lump sums if the amount, or quantity, of work within that item later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the (lump sum) Prices is as a result of a compensation event.

4.1. Format of the *price list*

(From the example given in an Appendix within the TSC3 Guidance Notes)

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

C2.2 the *price list*

Table 1: Cleaning and inspection scope:

Item	Material	Tube Length (m)	Tube ID (mm)	Tube OD (mm)	Wall Thick. (mm)	Total Tubes / Unit	Tube Config.	Cleaning rate	ECT rate
1/2ABP101RE	SS304L	6	13.6	16	1.2	1760	U-tube		
1/2ABP102RE	SS304L	6	13.6	16	1.2	1760	U-tube		
1/2ABP103RE	SS304L	6	13.6	16	1.2	1760	U-tube		
1/2ABP104RE	SS304L	6	13.6	16	1.2	1760	U-tube		
1/2ABP105RE	SS304L	6	13.6	16	1.2	1760	U-tube		
1/2ABP106RE	SS304L	6	13.6	16	1.2	1760	U-tube		
1/2ABP201RE	SS304L	12	13.6	16	1.2	1711	U-tube		
1/2ABP201RP	SS304L	12	13.6	16	1.2	926	U-tube		
1/2ABP301RE	SS304L	10	13.6	16	1.2	1711	U-tube		
1/2ABP401RE	SS304L	10	13.6	16	1.2	1769	U-tube		
1/2AHP501RE	C/Steel	15	17	21	2	1789	U-tube		
1/2AHP601RE	C/Steel	12	17	21	2	1789	U-tube		
1/2ABP202RE	SS304L	12	13.6	16	1.2	1711	U-tube		
1/2ABP202RP	SS304L	12	13.6	16	1.2	926	U-tube		
1/2ABP302RE	SS304L	10	13.6	16	1.2	1711	U-tube		
1/2ABP402RE	SS304L	10	13.6	16	1.2	1769	U-tube		
1/2AHP502RE	C/Steel	15	17	21	2	1789	U-tube		
1/2AHP602RE	C/Steel	12	17	21	2	1789	U-tube		
1/2APG001RF	C/Steel	16	12	16	2	266	U-tube		
1/2CET001CS	ADM Brass	3	14	16	1	803	Straight		
1/2CRF001RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1	52	Straight		
1/2CRF002RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1	52	Straight		
1/2CRF003RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1	52	Straight		
1/2CRF004RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1	52	Straight		
1/2CRF005RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1	52	Straight		
1/2CRF006RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1	52	Straight		

THE HIGH PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

Item	Material	Tube Length (m)	Tube ID (mm)	Tube OD (mm)	Wall Thick. (mm)	Total Tubes / Unit	Tube Config.	Cleaning rate	ECT rate
1/2CRF001WX	Titanium	12	18.05	19.05	0.5	845 ⁽¹⁾	Straight		
1/2CRF002WX	Titanium	12	18.05	19.05	0.5	845 ⁽¹⁾	Straight		
1/2CRF003WX	Titanium	12	18.05	19.05	0.5	845 ⁽¹⁾	Straight		
1/2CRF004WX	Titanium	12	18.05	19.05	0.5	845 ⁽¹⁾	Straight		
1/2CRF005WX	Titanium	12	18.05	19.05	0.5	845 ⁽¹⁾	Straight		
1/2CRF006WX	Titanium	12	18.05	19.05	0.5	845 ⁽¹⁾	Straight		
1/2CVI 001EX	Titanium	2.5	18	19	0.5	250	Straight		
1/2CVI 002EX	Titanium	2.5	18	19	0.5	250	Straight		
1/2GGR001RF	Cu Low Finned	3	22.2	25.4	1.6	516	Straight		
1/2GGR002RF	Cu Low Finned	3	22.2	25.4	1.6	516	Straight		
1/2GRH001RF	Brass copper Finned	3	22	24	1	108	Straight		
1/2GRH002RF	Brass copper Finned	3	22	24	1	108	Straight		
1/2GRH003RF	Brass copper Finned	3	22	24	1	108	Straight		
1/2GRH004RF	Brass copper Finned	3	22	24	1	108	Straight		
1/2GRH005RF	Brass copper Finned	3	22	24	1	108	Straight		
1/2GRH006RF	Brass copper Finned	3	22	24	1	108	Straight		
1/2GRH007RF	Brass copper Finned	3	22	24	1	108	Straight		
1/2GRH008RF	Brass copper Finned	1.5	14	16	1	54	Straight		
1/2GSS100ZZ	Ferritic stainless finned	13	14.31	19.05	1.75	647	U-tube		
1/2GSS200ZZ	Ferritic stainless finned	13	14.31	19.05	1.75	647	U-tube		
1/2GSS300ZZ	Ferritic stainless finned	13	14.31	19.05	1.75	647	U-tube		
1/2GSS400ZZ	Ferritic stainless finned	13	14.31	19.05	1.75	647	U-tube		

Note 1: Total population = 12848, but only 6.6% (845) to be inspected.

THE HIGH PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

Item	Material	Tube Length (m)	Tube ID (mm)	Tube OD (mm)	Wall Thick. (mm)	Total Tubes / Unit	Tube Config.	Cleaning rate	ECT rate
1/2GSY001 RF	Tube: copper alloy	2.52	15	17	1	115	Straight		
	Fins: Aluminium								
1/2SAP001RF	SA268 Gr18Cr2Mo	0.615	8	9.5	0.75	60	Straight		
1/2SAP002RF	SA268 Gr18Cr2Mo	1.237	11.2	12.7	0.75	292	Straight		
1/2SAP003RF	90-10 Cu-Ni	TBC	8	8.9	0.45	62	Straight		
1/2SAP004RF	SA268 Gr18Cr2Mo	1.232	8	9.5	0.75	137 x 2	Straight		
1/2SRI001EX	Titanium (ASTM B-338 Gr2)	8.196	20.4	22	0.8	1322	Straight		
1/2SRI002EX	Titanium (ASTM B-338 Gr2)	8.196	20.4	22	0.8	1322	Straight		
1/2STR001TX	C/Steel	3	21.18	25.4	2.11	206	U-tube		

Table 2: Specialised techniques as and when required

Specialised techniques	Hourly rate
Eddy current array (ECA)	
Remote field testing (RFT)	
Internal rotating system (IRIS)	
Saturation eddy current (PSEC and FSEC)	
Near Field testing (NFT and NFA)	
Laser optic testing	

Note: The above techniques' shall be used as and when required as a supplemental examination for specific degradation mechanisms identified by system engineer.

Table 3: Additional Expenses as and when required:

Item	Rate
Mobilization/demobilization cost (provide breakdown of cost)	
Eddy Current Team - Daily Rate for 12-hour shift (Non-Outage Projects)	
ET level III	
Safety Officer	
Standing Time – Cleaning (per team)	
Standing time – Eddy current (per team)	
Flights – Economy class return	
Transport – Car hire	
Accommodation	
Calibration Tubes – Manufacture and inspection feasibility study	
FFD assessments	

Notes:

1. The mobilization price provided for each outage includes Head Office support, travel time and expenses.
2. No upfront payments will be allowed for services.
3. Accommodation, car hire and air ticket will be actual cost and be in line with National Treasury cost containment.
 - a) Star hotel Accommodation (Inclusive of Vat) for dinner, bed, and breakfast and 2 soft drinks at dinner.
 - b) Car hire: Economy 4 or 5 door manual vehicles with Air conditioning (Also referred to as Group B) or equivalent class.
 - c) Air ticket: Lowest available Economy class tickets on well-established airlines will be used as well as low cost carries nationally.
4. All work under the contract will be carried out by Task Order, as and when the Employer requires it, in its sole discretion
5. Rates are to be inclusive of all costs to provide the service as defined in the Scope of Work, including but not limited to: Personal protective equipment (PPE), such as overalls, shoes, hard hats, etc.
6. VAT is excluded for the above rates
7. All prices will remain fixed for the first 12 months of the contract period; thereafter 15% of the prices will remain fixed and 85% will be subject to one annual adjustment using SEIFSA Table C3 Actual Labour Cost base Date will be the month in which the enquiry closes.
8. The use of local semi-skilled personnel to Western Cape and Koeberg Power Station is encouraged to be used.

PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	<i>Employer's Service Information</i>	
C3.2	<i>Contractor's Service Information</i>	
	Total number of pages	

C3.1: EMPLOYER'S SERVICE INFORMATION

Description of the service

Executive overview

The provision of eddy current and/or laser inspection services to the *Employer*, which include:

- The cleaning of the tubes
- Eddy Current testing (ECT)
- Eddy current array (ECA)
- Remote field testing (RFT)
- Internal rotating system (IRIS)
- Saturation eddy current (PSEC and FSEC)
- Near Field testing (NFT and NFA)
- Laser optic testing

Cleaning:

Details shall be provided on the proposed cleaning method.

All tube cleaning procedures shall be submitted to the *Employer* for review.

Detailed risk assessments shall be submitted to the *Employer* for review.

Inspection:

Details shall be provided on the proposed inspection method.

All inspection procedures shall be submitted to the *Employer* for review.

Detailed risk assessments shall be submitted to the *Employer* for review.

The *service* includes all support work, by the *Contractor*, to the *Employer*. These activities must include the following as a minimum:

- Mobilisation, set-up, calibration and removal of equipment;
- Mobilisation of qualified personnel;
- Performance of the required operations; and
- Inspection and analysis of data.

The scope of work includes, but is not limited to the following components:

Item	Material	Tube Length (m)	Tube ID (mm)	Tube OD (mm)	Wall Thick. (mm)
1/2ABP101RE	SS304L	6	13.6	16	1.2
1/2ABP201RE	SS304L	12	13.6	16	1.2
1/2ABP301RE	SS304L	10	13.6	16	1.2
1/2ABP401RE	SS304L	10	13.6	16	1.2

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1/2ABP201RP	SS304L	12	13.6	16	1.2
1/2ABP102RE	SS304L	6	13.6	16	1.2
1/2ABP202RE	SS304L	12	13.6	16	1.2
1/2ABP302RE	SS304L	10	13.6	16	1.2
1/2ABP402RE	SS304L	10	13.6	16	1.2
1/2ABP202RP	SS304L	12	13.6	16	1.2
1/2AHP501RE	C/Steel	15	17	21	2
1/2AHP601RE	C/Steel	12	17	21	2
1/2AHP502RE	C/Steel	15	17	21	2
1/2AHP602RE	C/Steel	12	17	21	2
1/2APG001RF	C/Steel	16	12	16	2
1/2CET001CS	ADM Brass	3	14	16	1
1/2CRF001RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1
1/2CRF002RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1
1/2CRF003RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1
1/2CRF004RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1
1/2CRF005RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1
1/2CRF006RF	Titanium (ASTM B-338 Gr2)	2.5	14	16	1
1/2CRF001WX	Titanium	12	18.05	19.05	0.5
1/2CRF002WX	Titanium	12	18.05	19.05	0.5
1/2CRF003WX	Titanium	12	18.05	19.05	0.5
1/2CRF004WX	Titanium	12	18.05	19.05	0.5
1/2CRF005WX	Titanium	12	18.05	19.05	0.5
1/2CRF006WX	Titanium	12	18.05	19.05	0.5
1/2CVI 001EX	Titanium	2.5	18.0	19.0	0.5
1/2CVI 002EX	Titanium	2.5	18.0	19.0	0.5
1/2GGR001RF	Cu Low Finned	3	22.2	25.4	1.6
1/2GGR002RF	Cu Low Finned	3	22.2	25.4	1.6
1/2GRH001RF	Brass copper Finned	3	22	24	1
1/2GRH002RF	Brass copper Finned	3	22	24	1
1/2GRH003RF	Brass copper Finned	3	22	24	1
1/2GRH004RF	Brass copper Finned	3	22	24	1
1/2GRH005RF	Brass copper Finned	3	22	24	1
1/2GRH006RF	Brass copper Finned	3	22	24	1
1/2GRH007RF	Brass copper Finned	3	22	24	1
1/2GRH008RF	Brass copper Finned	1.5	14	16	1
1/2GRH Spare	Brass copper Finned	3	22	24	1
1/2GSS100ZZ	Ferritic stainless finned	13	14.31	19.05	1.75
1/2GSS200ZZ	Ferritic stainless finned	13	14.31	19.05	1.75
1/2GSS300ZZ	Ferritic stainless finned	13	14.31	19.05	1.75
1/2GSS400ZZ	Ferritic stainless finned	13	14.31	19.05	1.75
1/2GSY 001 RF	Tube: copper alloy Fins: Aluminium	2.52	15	17	1
1/2PTR006RS	SS304L	2100	60.0	66.0	3.0
1/2PTR007RS	SS304L	2100	60.0	66.0	3.0
1/2SAP001RF	SA268 Gr18Cr2Mo	0.615	8.0	9.5	0.75
1/2SAP002RF	SA268 Gr18Cr2Mo	1.237	11.2	12.7	0.75
1/2SAP003RF	90-10 Cu-Ni	(+/-0.5m)	8.0	8.9	0.45
1/2SAP004RF	SA268 Gr18Cr2Mo	1.232	8.0	9.5	0.75
1/2SRI001EX	Titanium (ASTM B-338 Gr2)	8.196	20.4	22	0.8
1/2SRI002EX	Titanium (ASTM B-338 Gr2)	8.196	20.4	22	0.8
1/2STR001TX	C/Steel	3	21.18	25.4	2.11

Detailed work scope for each outage:

Component ID	INSPECTION PROGRAMMES		SAP FREQUENCY- currently specified (I&T uses)			LAST INSPECTION		ECT TO BE PERFORMED AS LISTED (ALIGNS WITH CURRENT RBI FREQUENCY OR MORE FREQUENT					
						Outages							
	RBI frequency	HX programme frequency	UNIT 1	UNIT 2	Basis	U1	U2	127	227	128	228	129	229
ABP 101 RE	6RO: Visual, General Corrosion (internal and external), waterbox only.	None recommended. Credit taken for existing controls	On Request	On Request	LOPP but RBI states 6RO	125	223					100%	100%
	Shell: No RBI required				Frequency based on RBI								
ABP 102 RE	6RO: Visual, General Corrosion (internal and external), waterbox only.	None recommended. Credit taken for existing controls	On Request	On Request	LOPP but RBI states 6RO	125	223					100%	100%
	Shell: No RBI required				Frequency based on RBI								
ABP 103 RE	6RO: Visual, General Corrosion (internal and external), waterbox only.	None recommended. Credit taken for existing controls	On Request	On Request	LOPP but RBI states 6RO	125	223					100%	100%
	Shell: No RBI required				Frequency based on RBI								
ABP 104 RE	6RO: Visual, General Corrosion (internal and external), waterbox only.	None recommended. Credit taken for existing controls	On Request	On Request	LOPP but RBI states 6RO	125	223					100%	100%
	Shell: No RBI required				Frequency based on RBI								
ABP 105 RE	6RO: Visual, General Corrosion (internal and external), waterbox only.	None recommended. Credit taken for existing controls	On Request	On Request	LOPP but RBI states 6RO	125	223					100%	100%
	Shell: No RBI required				Frequency based on RBI								
ABP 106 RE	6RO: Visual, General Corrosion (internal and external), waterbox only.	None recommended. Credit taken for existing controls	On Request	On Request	LOPP but RBI states 6RO	125	223					100%	100%
	Shell: No RBI required				Frequency based on RBI								

Note 1: The Unit 1 (1 ABP 101 to 106 RE) 6RO ECT above, was due in Outage 130, but this is a short duration outage and is therefore aligned with Outage 129.

THE HIGH-PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

Detailed work scope for each outage - continued

Component ID	INSPECTION PROGRAMMES		SAP FREQUENCY- currently specified (I&T uses)			LAST INSPECTION		ECT TO BE PERFORMED AS LISTED (ALIGNS WITH CURRENT RBI FREQUENCY OR MORE FREQUENT					
						Outages							
	RBI frequency	HX programme frequency	UNIT 1	UNIT 2	Basis	U1	U2	127	227	128	228	129	229
ABP 201 RE	Shell side: 6RO VISUAL (external)	None recommended. Credit taken for existing controls	4RO	4RO	LOPP but RBI states 4RO	125	223	100%				100%	
	Tube side:6RO Visual (internal and external)				Frequency based on RBI								
	Level Bottle: 8RO visual; 8RO UT-wall thickness (previous areas)												
ABP 201 RP	Shell: 4RO UT WALL THICKNESS	None recommended. Credit taken for existing controls	On Request	On Request	LOPP and no frequency specified in RBI	125	225						
	Tube side: 4RO Visual (internal and external)												
ABP 202 RE	Shell side: 6RO VISUAL (external)	None recommended. Credit taken for existing controls	4RO	4RO	LOPP but RBI states 4RO	125	223					100%	
	Tube side:6RO Visual (internal and external)				Frequency based on RBI								
	Level Bottle: 8RO visual; 8RO UT-wall thickness (previous areas)												
ABP 202 RP	Shell: 4RO UT WALL THICKNESS	None recommended. Credit taken for existing controls	On Request	On Request	LOPP and no frequency specified in RBI	125	225						
	Tube side: 4RO Visual (internal and external)												

THE HIGH-PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

Detailed work scope for each outage - continued

Component ID	INSPECTION PROGRAMMES		SAP FREQUENCY- currently specified (I&T uses)			LAST INSPECTION		ECT TO BE PERFORMED AS LISTED (ALIGNS WITH CURRENT RBI FREQUENCY OR MORE FREQUENT					
								Outages					
	RBI frequency	HX programme frequency	UNIT 1	UNIT 2	Basis	U1	U2	127	227	128	228	129	229
ABP 301 RE	Shell side: 4RO UT wall thickness	None recommended. Credit taken for existing controls	4RO	4RO	OHS RBI inspection	125	223	100%				100%	
	Tube side: 4RO ECT & Visual (internal and external)												
ABP 302 RE	Shell side: 4RO UT wall thickness	None recommended. Credit taken for existing controls	4RO	4RO	OHS RBI inspection	125	223	100%				100%	
	Tube side: 4RO ECT & Visual (internal and external)												
ABP 401 RE	Shell side: 2RO internal inspection and UT wall thickness	None recommended. Credit taken for existing controls	2RO	2RO	LOPP is more frequent at 2RO than RBI	125	225	100%	100%			100%	100%
	Tube side: 6RO ECT & Visual (internal and external)												
ABP 402 RE	Shell side: 2RO internal inspection and UT wall thickness	None recommended. Credit taken for existing controls	2RO	2RO	LOPP is more frequent at 2RO than RBI	125	225	100%	100%			100%	100%
	Tube side: 6RO ECT & Visual (internal and external)												

THE HIGH-PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

Detailed work scope for each outage - continued

Component ID	INSPECTION PROGRAMMES		SAP FREQUENCY- currently specified (I&T uses)			LAST INSPECTION							
	RBI frequency	HX programme frequency	UNIT 1	UNIT 2	Basis	U1	U2	127	227	128	228	129	229
AHP 501 RE	Shell side: 4RO internal inspection and UT wall thickness Tube side: 4RO ECT & Visual (internal and external)	None recommended Credit taken for existing controls	2RO	2RO	LOPP is more frequent at 2RO than RBI	125	225	100%	100%			100%	100%
AHP 502 RE	Shell side: 4RO internal inspection and UT wall thickness Tube side: 4RO ECT & Visual (internal and external)	None recommended Credit taken for existing controls	2RO	2RO	LOPP is more frequent at 2RO than RBI	125	225	100%	100%			100%	100%
AHP 601 RE	Shell side: 4RO internal inspection and UT wall thickness Tube side: 4RO ECT & Visual (internal and external)	None recommended Credit taken for existing controls	2RO	2RO	LOPP is more frequent at 2RO than RBI	125	225	100%	100%			100%	100%
AHP 602 RE	Shell side: 4RO internal inspection and UT wall thickness Tube side: 4RO ECT & Visual (internal and external)	None recommended Credit taken for existing controls	2RO	2RO	LOPP is more frequent at 2RO than RBI	125	225	100%	100%			100%	100%

THE HIGH-PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

Detailed work scope for each outage - continued

Component ID	INSPECTION PROGRAMMES		SAP FREQUENCY- currently specified (I&T uses)			LAST INSPECTION		ECT TO BE PERFORMED AS LISTED (ALIGNS WITH CURRENT RBI FREQUENCY OR MORE FREQUENT					
	RBI frequency	HX programme frequency	UNIT 1	UNIT 2	Basis	U1	U2	Outages					
								127	227	128	228	129	229
GRH 001 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	123	225	100%					100%
GRH 002 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	123	225	100%					100%
GRH 003 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	123	225	100%					100%
GRH 004 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	123	225	100%					100%
GRH 005 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	123	225	100%					100%
GRH 006 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	123	225	100%					100%
GRH 007 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	123	225	100%					100%
GRH 008 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	123	225	100%					100%
GGR 001 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	117	216	100%	100%				
GGR 002 RF	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	117	216	100%	100%				

Note 2: LOPP – Page 27: GRH/GGR - Internal inspection of the coolers was performed for the first time since commissioning in Outage 216 (CS08-044). Black zinc material was noted on the outer surface of the tube bundle. This was attributed to inadequate flushing during a change from zinc-based turbine oil to non-zinc-based oil. The coolers were subsequently given a 6RO laser inspection task. This has recently been upgraded to a 4RO eddy current inspection, the next implementation of which is in Outage x27.

THE HIGH-PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

Detailed work scope for each outage - continued

Component ID	INSPECTION PROGRAMMES		SAP FREQUENCY- currently specified (I&T uses)			LAST INSPECTION		ECT TO BE PERFORMED AS LISTED (ALIGNS WITH CURRENT RBI FREQUENCY OR MORE FREQUENT					
								Outages					
	RBI frequency	HX programme frequency	UNIT 1	UNIT 2	Basis	U1	U2	127	227	128	228	129	229
GSS 100 ZZ	1RO to change to original 2RO after bundle replacement	None recommended. Credit taken for existing controls	2RO	2RO	LOPP	125	225 (new)	100%	100%			100%	100%
GSS 200 ZZ	1RO to change to original 2RO after bundle replacement	None recommended. Credit taken for existing controls	2RO	2RO	LOPP	125	225 (new)	100%	100%			100%	100%
GSS 300 ZZ	1RO to change to original 2RO after bundle replacement	None recommended. Credit taken for existing controls	2RO	2RO	LOPP	125	225 (new)	100%	100%			100%	100%
GSS 400 ZZ	1RO to change to original 2RO after bundle replacement	None recommended. Credit taken for existing controls	2RO	2RO	LOPP	125	225 (new)	100%	100%			100%	100%
CET 001 CS	No RBI listed	None recommended. Credit taken for existing controls	2RO	2RO	LOPP	125	225	100%	100%			100%	100%
GSY 001 RF	No RBI listed. A new heat exchanger is being installed during X26. There is a 4RO visual inspection in OUTAGES X29.	None recommended. Credit taken for existing controls	N/A	N/A	LOPP Perform 100% ECT as a baseline to determine the future strategy.	123	223	0%	0%	0%	0%	100%	100%
APG 001 RF	Tube side: 6RO ECT & Visual (internal and external)	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	124	223	100%	100%				
SRI 001 EX	No RBI listed	None recommended. Credit taken for existing controls	6RO	6RO	LOPP	118	219	100%	100%				
SRI 002 EX	No RBI listed	None recommended. Credit taken for existing controls	6RO	6RO	LOPP	118	219	100%	100%				

THE HIGH-PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

Detailed work scope for each outage - continued

Component ID	INSPECTION PROGRAMMES		SAP FREQUENCY- currently specified (I&T uses)			LAST INSPECTION		ECT TO BE PERFORMED AS LISTED (ALIGNS WITH CURRENT RBI FREQUENCY OR MORE FREQUENT)					
	RBI frequency	HX programme frequency	UNIT 1	UNIT 2	Basis	U1	U2	Outages					
								127	227	128	228	129	229
CRF 001 RF	No RBI listed	None recommended. Credit taken for existing controls	6RO	6RO	LOPP	120	220	100%	100%				
CRF 002 RF	No RBI listed	None recommended. Credit taken for existing controls	6RO	6RO	LOPP	120	220	100%	100%				
CRF 003 RF	No RBI listed	None recommended. Credit taken for existing controls	6RO	6RO	LOPP	120	220	100%	100%				
CRF 004 RF	No RBI listed	None recommended. Credit taken for existing controls	6RO	6RO	LOPP	120	220	100%	100%				
CRF 005 RF	No RBI listed	None recommended. Credit taken for existing controls	6RO	6RO	LOPP	120	220	100%	100%				
CRF 006 RF	No RBI listed	None recommended. Credit taken for existing controls	6RO	6RO	LOPP	120	220	100%	100%				
CRF 001 WX	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	124	225	Scoped tubes					Scoped tubes
CRF 002 WX	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	125	224		Scoped tubes			Scoped tubes	
CRF003 WX	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	124	225						Scoped tubes
CRF 004 WX	No RBI listed	None recommended. Credit taken for existing controls	4RO	4RO	LOPP	125	224	Scoped tubes	Scoped tubes			Scoped tubes	
CRF005 WX	No RBI listed	None recommended.	4RO	4RO	LOPP	124	225	Scoped tubes					Scoped tubes
CRF 006 WX	No RBI listed	None recommended.	4RO	4RO	LOPP	125	224		Scoped tubes			Scoped tubes	
CVI 001 EX	No RBI listed	None recommended	6RO	6RO	LOPP	N/A	N/A	100%	100%				
CVI 002 EX	No RBI listed	None recommended	6RO	6RO	LOPP	N/A	N/A	100%	100%				
STR 001 TX	No RBI listed	None recommended	ONCE-OFF	ONCE-OFF	LOPP	125	224	100%	100%				

Note: 3: CRF WX - The peripheral tubes, high risk tubes, and other identified tubes will be verified but not 100% of the tubes will require inspection.

The following are a list of relevant indications to be detected:

- Inadequate bundle Venting resulting in Corrosion problems and Thermal losses,
- Tube Damage and erosion resulting from Inadequate Impingement Plates,
- High Velocity Wet Steam Causing Erosion of Shells and Support Plates,
- Erosion of Tubes and/or Baffle Plates Resulting from insufficient Water Level
- Erosion and Tube Damage Resulting from Inadequate Support Plate thickness
- Erosion and Steam Flow from Tube/Plate Leakage
- Pitting
- Inlet End Erosion
- Erosion / Corrosion
- Corro Tip Erosion

Deliverables

Inspection reports are provided to the *Employer* within 36 hours after the completion of an inspection.

This summary report contains:

- The results of the inspection.
- The detailed description of the noted indications including drawings that clearly show the positions and orientations.
- Tube maps detailing locations of indications.
- The description and results of the calibration.
- The description of the possible non conformities with the justification of their acceptability.

Employer's requirements for the service

General

- No work may be done unless there is a specific permit to work (PTW) for the job in place.
- Services must be carried out observing the Employer's "SHE Specifications for Contractors".
- All services will be subject to inspections by the Employer.
- All services will be governed by the Employer's work control process. The Supplier (specifically, their on-site Supervisor) will be issued with the work package and the relevant works therein describing the works that must be performed and on which equipment work must be performed.
- The Employer's Representative will record all "As Found Conditions", "Corrective Actions", "Measuring & Testing Equipment", "Craftsman" and his signature on the work package. The above information serves as history for the Employer when referring to the services.
- The Supplier is to comply with any relevant labour legislation and apply to the Ministerial Determination for working hours and receive approval prior to the starting date. The Supplier is to submit the approval to the Employer's Representative prior to starting date.

- The Supplier is responsible for the Personal Protective Equipment (PPE) for his employees. A coverall, hard hat, safety boots, ear plugs, gloves and safety glasses are mandatory safety equipment at the site.

Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
KOU	Koeberg Operating Unit
PIT	Plant Induction Training
NDT	Non-Destructive Testing

Management strategy and start up.

The *Contractor's* plan for the service

One month prior to the inspections being performed an “intervention” file must be submitted to the *Employer* for review. The *Contractor* allows two weeks in his planning for this *Employer* activity. The “intervention” file includes:

- Organisation chart.
- Description of the activities to be carried out during intervention and work plan.
- List and copies of NDT procedures to be used with reference.
- List and copies of NDT personnel and certification / qualification records.
- Appointed Safety Officer independent of the cleaning and eddy current teams
- Quality plan, list of applicable documents.
- Detailed time schedule of the inspection. – The inspection schedule shall be drawn-up in consultation with the *Employer's Representative who shall provide the outage maintenance inspection window*. The inspection schedule shall be completed using MS Project.
- Equipment and manpower description, list of spare parts available on *site*.
- Specific needs and requirements.
- Safety plan and detailed risk assessments.

Management meetings

Regular meetings of a general nature may be convened and chaired by the *Supply Manager* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
General to discuss inspection schedule and operational experience	Before and after every outage	KOU	Employer And Contractor
Outages Progress and feedback	Daily early morning meetings for the full duration of the outages	KOU	Employer And Contractor

Meetings of a specialist nature may be convened as specified elsewhere in this Service Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the service. Records of these meetings shall be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

Invoicing and payment

Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Service Manager's* payment certificate.

The *Contractor* shall address the tax invoice to and include on each invoice the following information:

Name and address of the *Contractor* and the *Service Manager*;

The contract number and title;

Contractor's VAT registration number;

The *Employer's* VAT registration number 4740101508;

Description of service provided for each item invoiced based on the Price List;

Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
 (add other as required)

Reference to Contract and/or Task instruction number

A descriptive title of the service covered by the Invoice and/or the Contract's assessment number

A copy of the Assessment Certificate/Signed Task instruction

All invoices are to be addressed as follows:

All invoices are to be submitted directly to the Eskom e-mail address invoiceseskomlocal@eskom.co.za

Kindly call the Finance Shared Service call centre on 011 800 5060 or e-mail FPSS@eskom.co.za to follow up on any payment queries.

The *Contractor* attaches the detail assessment of all work done for each item in the Price List to each tax invoice showing

- the Price for each lump sum item in the Price List or Task Order which the *Contractor* has completed and
- where a quantity is stated for an item in the Price List or Task Order, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.

Contract change management

Should there be any changes to the scope the *Employer* shall inform the *Contractor* in writing

Management of work done by Task Order

The current schedule of tasks and activities is provided in Table 1.

The outage dates, as per the Koeberg 10 Year Production plan Revision 74A are as follows:

Activity	Period	Venue
Outage – 127	21 July 2024 to 06 Feb 2025	Koeberg Operating Unit
Outage – 227	08 Sept 2025 to 27 March 2026	Koeberg Operating Unit
Outage – 128	10 Aug 2026 to 27 Sept 2026	Koeberg Operating Unit
Outage – 228	09 Aug 2027 to 26 Sept 2027	Koeberg Operating Unit
Outage – 129	28 Feb 2028 to 28 April 2028	Koeberg Operating Unit
Outage – 229	26 Feb 2029 to 27 April 2029	Koeberg Operating Unit

- The above information and start dates are based on Koeberg's production plan Rev 74A and is subject to change. Any changes will be communicated to the *Contractor*.
- The above outage durations is for planning purposes only and does not necessarily reflect the total duration the *Contractor* is required to spend on site.
- The provisional start and finish dates shall be stipulated on the Task Instructions issued 3 months before the outage start dates.
- The actual start and finish dates shall be finalized when the inspection schedule is issued by the contractor based on the maintenance window provided by the Employer. This shall include FFD training time required before entry to site.

Health and safety, the environment and quality assurance

Health and safety risk management

The *Contractor* shall comply with the health and safety requirements contained in Annexure A, B, C1 and C2 to this Service Information.

Quality assurance requirements

- The *services* is classified Q3/L3 and thus the *Contractor* complies with the requirements of 238-103 (revision 1) - Supplier Quality Programme Requirements.



THE HIGH-PRESSURE CLEANING OF TUBES, EDDY CURRENT AND/OR LASER INSPECTIONS ON AN AS AND WHEN REQUIRED BASIS AT KOEBERG OPERATING UNIT

- The on-site work is subjected to a Quality Assurance program. A Quality Plan specific to each outage is

established and submitted to the *Employer* for acceptance before commencement of any on site work.

Reference & Revision	Description
DSG 310-087	Generic service specification
KSA-037 Rev. 2	Qualifications on certification requirements for personnel performing on destructive at testing at Koeberg Nuclear Power Station
KAR-240 Rev. 1	Written Practice for the Qualification, Certification and Authorisation of NDE Personnel at Koeberg Power Station
238-103 Rev 1	Supplier Quality Programme Requirements
KAA 611 Rev. 5	Emergency Mustering accountability evacuation
36-1137	Heat Exchanger Cleaning Guideline
36-58	Condenser Healthcare Guideline
32-136 (0)	Eskom Level 1 Construction Safety, Health and Environment Procedure

Procurement

Skills Development Localisation & Industrialisation (SDL&I) Undertaking

Job Creation

Supplier Name	Number of Jobs created

Supplier Name	Number of Jobs retained

Skills Development

Skill type/Occupation	Eskom Target	Proposed Number of Candidates
Eddy Current Level 2 Technicians	4 to 8	
Eddy Current Level 1 Technicians	4 to 8	

People

Minimum requirements of people employed

Certification of the *Contractor's* personnel

- All international *Contractors* shall be in possession of a Police Clearance from the country of origin.
- All international *Contractors* shall be in possession of an Authorization Permit to Work in South Africa obtainable from the SA Embassy.
- Only level II personnel are used by the *Contractor*, for the analysis of the inspection data.
- Level I personnel is used by the *Contractor*, for data acquisition.
- The *Contractor* does probe manipulation with trained assistants.

- For all scope of work the certification of personnel shall meet the requirements of procedure 240-123597661 (KSA-037), "Qualification and Certification Requirements for Personnel performing Non-Destructive Testing at Koeberg Nuclear Power Station."
- Authorisation of the *Contractor's* inspection personnel is as per the requirements of the *Employer's* authorisation procedure, KAR-240. The *Employer's* Inspection and Test Department issues this authorisation in writing.

BBBEE and preferencing scheme

The *Contractor* shall be in possession of valid BBBEE status level of contribution.

EQUIPMET: Contractor equipment

- The Supplier supplies the equipment required for the cleaning and inspections.
- The Supplier provides the processes used to control equipment, materials and specifically foreign material exclusion.
- The required calibration documentation must be provided and presented, by the Supplier, to the Employer prior to being used.

ESKOM – KOEBERG'S SCOPE OF SUPPLY

Eskom will supply:

- Rigging and scaffolding support when requested by the supplier.
- Temporary offices with desks and access to computers.
- Access to equipment procedures and documentation.
- All component drawings will be made available to the supplier at the start of the service.
- The Supplier shall indicate any other support service required from Eskom

Working on the Affected Property

i. Employer's Affected Property access control

1. Fitness for duty management

The Contractor adheres to the Employer's procedure re. Fitness for duty requirements for vendors and contractors who are required to perform work inside the owner controlled areas of KNPS (335-68). This document is not applicable to visitors. Accesses for visitors are dealt with in KAA-777. The Contractor shall appoint a FFD "controller" to facilitate all their personnel training requirements for entry to site.

The objective of the Employer's FFD programme is to provide reasonable assurance that the Contractor's plant workers will perform their tasks in a reliable and trustworthy manner and are not under the influence of any substance or suffer from any health impairment which in any way adversely affects their ability to safely and competently perform their duties. The FFD programme also gives reasonable assurance that the workforce has been trained and their technical competence has been assessed.

- Security screening enrolment, drug test and criminal check (Please note Criminal check takes few days and only once you pass criminal check can the following training be booked)
- Medical examination (to be performed externally and medical results presented to Koeberg Medical Centre)

The *Employer's* FFD process is designed to only allow the *Contractor's* employees to perform work if they:

- Have valid identification documents;
- Have been declared free of drugs and alcohol;
- Have been declared healthy, physically able and free of any medical condition that could impair their ability to perform the work they have been appointed for;
- Have valid work permits ;
- Have completed the security background verification process;
- Have the qualifications required for the task;
- Have the minimum plant access training required to work on site;
- Have been declared competent and authorised to perform the work they have been appointed for;
- Have received specific training required for the work they will be required to perform; and
- Have signed a non-disclosure agreement to protect the *Employer's* information, they come in contact with.

It is expected that all contract personnel are competent in the following disciplines:

- Working at Heights (Online) assessment at Koeberg
- Material Handling (Online) assessment at Koeberg
- Plant Induction Training (Online) assessment at Koeberg
- Foreign Material Exclusion training (FME) online assessment at Koeberg
- Human performance training (HP) Online assessment at Koeberg

Radiation worker training or Requalification on Site (If required for specific components in the controlled zone)

- Safety Induction Course (On site prior to start of work)

Notes:

- Plant induction training (PIT) is Koeberg specific and shall be for Eskom's account (4hrs training and 2 hrs for assessment).
- Meeting FFD requirements is entirely the responsibility of the [Contractor/Consultant] and all activities described in procedure 335-68 paragraph 6.2 are performed offsite at the cost of the [Contractor/Consultant] before his/her employees will be registered on the FFD system.

Assessment

All NDT staff shall be trained on the use of Koeberg processes. This will be followed by a capability assessment as a pre-requisite for deployment on site.

2. FFD requirements before registration takes place

Information the *Contractor's* employee must supply:

- Identification document;

- Work permit (non SA citizens);
- Qualifications;
- Curriculum Vitae (CV);
- Criminal record history; and
- Proof of residential address.

Forms that the *Contractor's* employee must sign:

- Pre-placement medical examination;
- Baseline questionnaire for audiometry;
- Medical declaration;
- Security permit application;
- Consent to disclose criminal information (if the Employer is performing the criminal check);
- SAPS enquiry; and
- Non-disclosure agreement (protection of information)

3. Fraudulent Documents

The *Contractor's* employees that have presented fraudulent documentation are permanently denied access to the *Employer's* Koeberg site.

4. False Declarations

The *Contractor's* employees that have made false declarations are permanently denied access to the *Employer's* Koeberg site.

5. Medical examinations

Medical examinations are done by the Employer approved external medical practitioners.

These are:

Occupational Health Practice	Contact Person	Telephone	e-mail address
Life Occupational Health	Magda van Zyl	0215917050	Magda.VanZyl@lifehealthcare.co.za
Incon	Benita Du Preez	021 975 2694 ext. 2001	benita@incon.co.za
OCSA	Sibusiso Ngubane	0219810141	sibusison@ocsa.co.za
EOH	Pam Kinnock	0212527750	Pam.Pinnock@eoh.co.za
Fair Care Health	Colleen Paul	021 552 1377 I	hmalaka@msn.com

The *Contractor* is responsible for the cost of the examination.

6. Exit procedure

The *Contractor* and the *Employer's Agent* ensure that permit holders that no longer require access to the Affected Property follow the FFD exit procedure. Failure to do so may result in the *Contractor's* employee being denied access in future.

The duration of the exit activity is approximately 90 minutes and includes an exit medical examination.

7. Security check points

Prior to access to Affected Property, the *Contractor* passes through various security check points, via

entrance at the R27 access gate, entrance at the Duynefontein entrance and at Access Control Point 1 (ACP-1). All temporary worker/visitors permits are issued at ACP-1.

8. Access to Radiological Areas “Controlled Zones” and Reactor Building (where applicable)

Where work is to be performed in a radiological area (Controlled Zone), the *Contractor* needs to pass through a dosimetry-issue check point.

General access for inspections and measurements in the reactor buildings are not allowed during the operation of the plant and are limited during the refuelling outages with access limitations in accordance with KSA-062.

Access to radiological areas is subject to all training and verifications being completed as stated in this Service Information.

9. Prohibited/unauthorised items on site

In terms of the National Key Point Act 102 of 1980, Koeberg Operating Unit is a declared National Key Point (NKP). The National Key Point Act requires and empowers the owner of the National Key Point (Power Station Manager), to implement measures that will ensure the security of the National Key Point. The National Key Point area at the power station is the area within the protected area barrier (ACP 2 inwards).

One such security measure is procedure KAA-777 Revision 4 (Process for access to Koeberg Nuclear Power Station). The procedure stipulates that the following items are prohibited from being brought onto site, unless specifically authorised:

- explosives or components thereof,
- habit forming drugs,
- alcohol,
- mercury,
- acids,
- cellular phones,
- firearms, ammunition or any part thereof, and
- cameras

Contractor personnel violating the procedure will be investigated and may result in action being instituted against such individuals and possible removal from site.

To keep the *Contractor* informed, pictograms of the items are placed at all ACP 2 access points and it is also addressed in the Plant Induction Training Course (PIT). It is the responsibility of each of the *Contractor's* employees to ensure compliance and to refrain from bringing prohibited/unauthorised items onto site.

10. Vehicles and tools/equipment

Note: All cleaning and inspection equipment are supplied by the Contractor.

Calibration certificates shall be made available for all calibrated equipment which shall be handed to the KOU calibration laboratory for verification.

All equipment and tools are subject to a security screening before they are allowed on the Affected Property. All equipment and tools must be listed and specified before they are brought on Affected Property. This list will serve as evidence for removal permits upon Completion of the *service*.

Vehicles are only allowed on Affected Property if justification is provided to the *Service Manager* that such a vehicle is essential to provide the Service.

11. Emergency mustering and accountability and evacuation

- Due to the nature of the site the *Employer* is required to have full accountability of all personnel at all times.
- The *Contractor* maintains a current status accountability list of all his personnel on site.
- The accountability list is handed to the *Employer* each time a change occurs.
- The *Contractor* ensures that his personnel take full responsibility of this requirement and that his personnel are fully au fait with the mustering requirements as detailed in procedure KAA 611.

12. Facilities

- The *Contractor* is liable for any damage incurred to the *Employer's* facility during the period of occupation by the *Contractor*.
- The *Contractor* submits a facilities checklist to the *Employer* for acceptance, prior to occupation and again upon departure, which serves as proof of any damage to the *Employer's* facility.
All expenses incurred by the *Employer* in the event of the *Employer* having to perform repairs, at a fee that is in line with the current building tariffs, are for the *Contractor's* account.

13. Electric power supplies

- Electric power for use during the *services* is supplied free of charge to the *Contractor* and no connection fee is levied.
- All electrical installations comply with the details set out in the applicable regulations.
- The *Employer* does not guarantee continuity of supply and power failures do not constitute a compensation event.

14. Canteen and snack bar

- The canteen and snack bar are only used on a cash basis.
- The *Contractor* supplies restroom facilities and vending machines at his own expense, if required.

15. Telephones

No cellular or mobile phones are allowed on KOU site.

ii. People restrictions, hours of work, conduct and records

1. People

- The *Contractor* employs in and about the Provision of the Service only such persons that are careful, competent and efficient in their several trades and callings and the *Employer* reserves the right to object to and require the *Contractor* to remove from the *services*, forthwith, any person employed by the *Contractor* in or about the Provision of the Works who, in the opinion of the *Employer's Agent*, misconduct's himself or is incompetent or
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- negligent in the proper performance of his duties and such person is not again employed for the *services* without the written permission of the *Employer's Agent*.
- The *Contractor*, in and about the Provision of the *Services*, provide evidence of skills assessment (including qualifications) for all his staff. *Contractor* project manager, QC and supervisors are required to present SAQA approved certificates (or equivalent), for the position that they fulfil. Any personnel that do not meet the panel requirements will have their access to site revoked. For mechanical contracts, the contractor must demonstrate ASME construction and maintenance/testing skills, knowledge and oversight.
- All engineering work is performed by suitably qualified and experienced individuals. The *Contractor* demonstrates to the *Employer's Agent*, for his acceptance, that the assigned persons fulfil these requirements and submits a brief CV of each engineer in and about the Provision of the Works. If design work is carried out in jurisdictions where engineering work is governed by a formal professional body, the engineers taking responsibility for the work must be registered as professional engineers with that body.
- The *Contractor* ensures that the *Contractor's* employees are reasonably fluent in the language of the contract.
- The *Contractor* maintains at all times a harmonious relationship with and co-operates with the *Employer* and all its suppliers and sub-suppliers or their employees who may be involved.
- Key personnel
 - The *Contractor* ensures that all key personnel assigned to the *services* meet the requirements of the *Employer's* security and medical qualifications as well as training and experience generally required by similar utilities elsewhere in respect of similar work. Where required, these staff members also meet such requirements as the National Nuclear Regulator may stipulate from time to time.
 - *Contractor* supervisors are deemed to be key people and are dedicated to each project.
- The *Contractor* provides orientation and technical training for all key personnel in accordance with the requirements of the *Employer's* Radiological Safety Regulations, the *Employer's* Industrial Safety Programme, and, in general, the whole framework of plant rules and regulations which may be in force at the *Employer's* Site from time to time, which is available on request.
- All Radiation workers comply with such radiation protection standards as is required by the *Employer*.
- The *Contractor* regularly reports person hours worked to the *Employer's Agent* on a monthly basis.

2. Ethics

The *Employer* is committed to the highest standard of ethical behaviour and expects the same from all contractors.

3. Confidentiality and Publicity

- The exchange between the Parties or the disclosure to third parties of information is subject to the provisions of the Nuclear Energy Act 92 of 1982, the National Key Points Act 102 of 1980 and the Protection of Information Act 84 of 1982.
- The *Contractor* agrees that neither the *Contractor* nor its employees, agents or Subcontractors makes any public statements or release to any third party any information concerning the *services* without first obtaining the written approval of the *Employer* which is not unreasonably withheld. Requests to release information is co-ordinated through the designated *Employer's* Procurement Manager or the *Employer's* Power Station Manager or as otherwise specified in the Service Information.
- The *Contractor* ensures that his employees, agents and Subcontractors adhere to these restrictions.

4. Radiation Workers (if required)

It is a Nuclear license requirement that all personnel classified as radiation workers on completion of their work period on a Nuclear site receive a final whole body count administered by the *Employer's* Radiation Protection Group at the site.

- The *Contractor* ensures that all radiation workers receive a whole body count clearance certificate from the *Employer's* Radiation Protection group on their last day of work on the *Employer's* site.
- For control purposes the final payment of the contract is withheld if the tax invoice is not accompanied by a clearance certificate which the *Contractor* obtains from the *Employer's* Radiation Protection Group on site. Such clearance certificate is not unreasonably withheld by the *Employer*, failing which; the *Employer* releases the payment within one week.

People restrictions, hours of work, conduct and records

The *Contractor* only carries out work under this Contract, taking due cognisance of the following constraints and as directed by the *Employer's Agent*.

During outages, the inspections are performed in a 24-hour shift regime. The *Employer's Agent* manages and determines the staff complement per shift.

General

- No work is done unless there is a specific permit to work (PTW) for the job.
- The *services* are carried out observing the *Employer's* "Eskom Level 1 Construction Safety, Health and Environment Procedure – reference 32-136(0)"
- The *services* are subject to inspections by the *Employer*,
- The *Contractor's* work is governed by the *Employer's* work control process. The *Contractor* (specifically, the on-site supervisor) is issued with the work package describing the work to be performed and on which equipment the work is performed.
- The *Employer's Agent* records all "As Found Conditions", "Corrective Actions", "Measuring & Testing Equipment", "Craftsman" and signs the work package, once it is acceptable. The above information serves as history for the *Employer* when referring to the *services*.
- The *Contractor* complies with all relevant labour legislation and applies to the Ministerial Determination for working hours, and obtains approval prior to the *starting date* of each Task. The *Contractor* submits these approvals to the *Employer's Agent* prior to *starting date* of each Task.
- The *Contractor* supplies Personal Protective Equipment (PPE) for his employees. A hard hat, safety boots, ear plugs and safety glasses are mandatory safety equipment at the *Employer's* site. Work may only start when the *Contractor* has signed the relevant PTW and all safety precautions are in place.
- Emergency Mustering and Accountability and Evacuation

Due to the nature of the site the *Employer* is required to have full accountability of all personnel at all times. It is therefore required that the *Contractor* maintains a current status accountability list of all its personnel on site. The accountability list is handed to the *Employer* each time a change occurs. The *Contractor* ensures that his site representative takes full responsibility of this requirement and that he and his personnel is fully au fait with the mustering requirements as detailed in procedure KAA-611.

- Personnel

All personnel are in possession of a valid identification document or passport. All personnel are cleared to work at the site by the South African authorities, prior to being cleared as a temporary worker. The *Contractor* allows 14 days for clearance. Until clearance is obtained the personnel is allowed on site as a visitor, meaning that the visitor is in constant eye contact with one of the security cleared *Contractor* personnel. Security clearance or refusal thereof, does not constitute a compensation event.

All personnel access and leave the site via the security controlled access point, where all are subjected to security screening procedures.

- Vehicles and Tools/equipment

All equipment and tools are subject to a security screening before they are allowed on the site. All equipment and tools are listed and specified before they are brought on site. This list serves as evidence for removal permits. Vehicles are only allowed on site, if justified to the *Employer* that such a vehicle is necessary to Provide the Services.

Cooperating with and obtaining acceptance of Others

- In Providing the Services, the *Contractor*.
- Makes available the *key persons* for Providing the Services.
- Makes it his business to gain sufficient understanding relevant to the *services* and of the *Employer's* mission and objectives.
- Seeks out everything necessary to identify those matters that fall fully or partially within the scope of the *services*, whether or not such matters are addressed in the description of the *services* or in the Scope or in other requirements for the *services* stated from time to time.
- Brings to the attention of the *Employer* any additional services that the *Contractor* believes should be performed by him in keeping with sound professional practice.
- Notifies the *Employer* of any matter that the *Contractor* disagrees with or cannot resolve to his satisfaction.
- Co-operates at any time with Others (e.g. an independent person) appointed by the *Employer* to review work done by the *Contractor* in Providing the Services.
- Co-operates and provides information as required by the *Employer* for issues affecting the *services*, but outside the scope of the *services*.

Site services and facilities

Provided by the *Employer*

1.4 Topographical

1.4.1 Location of the site

The site is located at Koeberg Nuclear Power Station (KNPS) north of Melkbosstrand in the South Western Cape and is reached via the main road from Cape Town to Saldanha (R27). The turn off to KNPS is indicated on the R27. KNPS is approximately 30km north of Cape Town and the approximate co-ordinates are 33° 40.7'S and 18° 26.1'E.

After the turn off, the access route follows the main access road to KNPS.

1.4.2 Security check points

Prior to access to site, there are two Public Exclusion Barrier (PEB) security check points, viz. at the entrance from the R27 and at the entrance from Duynfontein. Security access is through Access Control Points (ACP) 1 and 2.