



NEC3 Professional Services Contract (PSC3)

**Contract between Eskom Holdings SOC Ltd
(Reg No. 2002/015527/30)**

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

**for The provision of continuous Marine Engineering,
Monitoring, and Evaluation on an as and when
required basis at Koeberg Operating Unit for a
period of 5 years**

Contents:	No of pages
Part C1 Agreements & Contract Data	16
Part C2 Pricing Data	5
Part C3 Scope of Work: The Scope	42

CONTRACT No. [Insert at award stage]



2024-04-12
Q3/L3 Service

PART C1: AGREEMENTS & CONTRACT DATA

Document reference	Title	No of pages
C1.1	Form of Offer & Acceptance	3 - 4
C1.2a	Contract Data provided by the <i>Employer</i>	6
C1.2b	Contract Data provided by the <i>Consultant</i>	[•]

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:

The provision of continuous Marine Engineering, Monitoring, Evaluation and Maintenance on an as and when required basis at Koeberg Operating Unit for a period of 5 years

The tenderer, identified in the Offer signature block, has

<i>either</i>	examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.
<i>or</i>	examined the draft contract as listed in the Acceptance section and agreed to provide this Offer.

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 *Consultant* 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.

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 14% is	R
The offered total of the Prices inclusive of VAT is	R
(in words)	

If Option E or G apply, for each offered total insert in brackets, "(Not Applicable – Cost reimbursable)"

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 *Consultant* 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

Schedule of Deviations

Note:

1. To be completed by the Employer prior to award of contract. 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		
6		
7		

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

.....

Mr Sadika Touffie

Capacity

.....

Senior Manager Nuclear Engineering

On behalf of

(Insert name and address of organisation)

**Eskom Holdings SOC Limited
Koeberg Nuclear Power Station
R27 off West Coast Road
Melkbosstrand
South Africa, 7440**

Name & signature of witness

.....
.....

.....
.....

Date

.....

.....

C1.2 PSC3 Contract Data

Part one - Data provided by the Employer

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

1. Please read the relevant clauses in the conditions of contract before you enter data. 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.
2. The PSC3 options are identified by shading in the left hand column. In the event that the option is not required select and delete the whole row.
3. Where the symbol “[●]” is used data is required to be inserted relevant to the clause and statement which requires it.]

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

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option and secondary Options	<p>G: Term contract</p> <p>W1: Dispute resolution procedure</p> <p>X1: Price adjustment for inflation</p> <p>X2: Changes in the law</p> <p>X9: Transfer of rights</p> <p>X10: Employer’s Agent</p> <p>X11: Termination by the Employer</p> <p>X18: Limitation of liability</p> <p>Z: Additional conditions of contract</p>
	of the NEC3 Professional Services Contract (April 2013) ¹	
10.1	The Employer 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

¹ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009 and www.ecs.co.za

Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg	
Tel No.	011 803 8008	
Fax No.	011-803 3009	
11.2(9)	The <i>services</i> are	The provision of continuous Marine Engineering, Monitoring, Evaluation and Maintenance on an as and when required basis at Koeberg Operating Unit for a period of 5 years
11.2(10)	The following matters will be included in the Risk Register	Minutes of early warning meetings and Decision resulting from risk reduction meetings.
11.2(11)	The Scope is in	Part 3: Scope of Work and all documents to which it references.
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	5 Days
13.6	The <i>period for retention</i> is	5 years following Completion or earlier termination.

2 The Parties' main responsibilities

25.2	The <i>Employer</i> provides access to the following persons, places and things	access to	access date
		1	Site <i>starting date</i>
		2	Relevant Documentation to scope <i>starting date</i>
		3	Training facilities <i>starting date</i>

3 Time

31.2	The <i>starting date</i> is.	01 July 2024	
11.2(3)	The <i>completion date</i> for the whole of the <i>services</i> is.	30 June 2029	
11.2(6)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date
		1	Health and safety File that include a full protection plan <i>starting date</i>
		2	Quality assurance plan <i>starting date</i>
		3	Update staff authorisation file <i>starting date</i>
31.1	The <i>Consultant</i> is to submit a first programme for acceptance within	2 weeks of the Contract Date.	

32.2	The <i>Consultant</i> submits revised programmes at intervals no longer than	1 week.
4	Quality	
40.2	The quality policy statement and quality plan are provided within	1 week of the Contract Date.
42.2	The <i>defects date</i> is	52 weeks after Completion of the whole of the services.
5	Payment	
50.1	The <i>assessment interval</i> is	On the 25th day of each month.
50.3	The <i>expenses</i> stated by the <i>Employer</i> are	As per the section: Pricing Data (Option G)
51.1	The period within which payments are made is	4 weeks after receipt of tax invoice
51.2	The <i>currency of this contract</i> is the	South African Rand (ZAR)
51.5	The <i>interest rate</i> is	<p>the publicly quoted prime rate of interest charged by [●] Standard Bank of South Africa Limited at the time an amount payable in SA Rand was due,</p> <p>and</p> <p>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	Rights to material	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.

8	Indemnity, insurance and liability	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.
82.1	The <i>Consultant'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
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	
G	Term contract	
21.4	The <i>Consultant</i> prepares forecasts of the total Time Charge and <i>expenses</i> at intervals no longer than	4 weeks.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is	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 the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering. (See www.ice-sa.org.za).
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	Cape Town, South Africa
	The person or organisation who will choose an arbitrator	
	<ul style="list-style-type: none"> • if the Parties cannot agree a choice or • if the <i>arbitration procedure</i> does not state who selects an arbitrator, is 	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.
12	Data for secondary Option clauses	
X1	Price adjustment for inflation	
X1.1	The index is	Refer CPA indexes included in invitation to tender, base date April 2024

The staff rates are
 {state whether “Fixed at the Contract Date
 and are not variable with changes in salary
 paid to individuals” or “Variable with
 changes in salary paid to individuals”}

All rates will remain fixed for the first 12 months of
 the contract period; thereafter 20% of the services
 will remain fixed and the remaining 80% will be
 adjusted in accordance with the SEIFSA Table C3.

X2	Changes in the law	
X2.1	The law of the project is	South African Law
X9	Transfer of rights	The <i>Employer</i> owns the <i>Consultant's</i> rights over material prepared for this contract by the <i>Consultant</i> except as stated otherwise in the scope. The <i>Consultant</i> obtains other rights for the <i>Employer</i> as stated in the Scope and obtains from Sub consultant equivalent rights for the <i>Employer</i> over the material prepared by the Sub consultant. The <i>Consultant</i> provides to the <i>Employer</i> the documents, which transfer these rights to the <i>Employer</i>.
X10	The <i>Employer's</i> Agent	
X10.1	The <i>Employer's</i> Agent is	
	Name:	Ms Mmamotiti Rahube
	Address	Koeberg Nuclear Power Station R27 Off West Coast Road, Melkbosstrand, 7441
	The authority of the <i>Employer's</i> Agent is	to carry out all the actions of the <i>Employer</i> in this with the exception of those required by clauses 51.1, 80, 81, 81.1.and 90
X11	Termination by the <i>Employer</i>	There is no reference to Contract Data in this Option and terms in italics used in this Option are identified elsewhere in this Contract Data.
Z	The <i>Additional conditions of contract</i> are	Z1 to Z14 always apply.

Z1 Cession delegation and assignment

- Z1.1 The *Consultant* 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 *Consultant* 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 *Consultant* 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 *Employer* within two weeks of the Contract Date of the key person who has the authority to bind the *Consultant* on their behalf.

Z2.3 The *Consultant* 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 *Consultant* in writing.

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

Z3.1 Where a change in the *Consultant's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Consultant's* B-BBEE status, the *Consultant* notifies the *Employer* within seven days of the change.

Z3.2 The *Consultant* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.

Z3.3 Where, as a result, the *Consultant's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Consultant's* obligation to Provide the Services.

Z3.4 Failure by the *Consultant* 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 those stated in core clause 91. The payment on termination includes a deduction of the forecast of the additional cost to the *Employer* of completing the whole of the *services* in addition to the amounts due in terms of core clause 92.1.

Z4 Confidentiality

Z4.1 The *Consultant* 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 *Consultant*, enters the public domain or to information which was already in the possession of the *Consultant* at the time of disclosure (evidenced by written records in existence at that time). Should the *Consultant* disclose information to Others in terms of clause 23.1, the *Consultant* ensures that the provisions of this clause are complied with by the recipient.

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

Z4.3 In the event that the *Consultant* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Consultant*, 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 *Consultant* 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 *Employer's* project works or any portion thereof, in the course of Providing the Services and after Completion, requires the prior written consent of the *Employer*. All rights in and to all such images vests exclusively in the *Employer*.

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, 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 Provision of a Tax Invoice. Add to core clause 51

- Z6.1 The *Consultant* (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.

Z7 Notifying compensation events

- Z7.1 Delete from the last sentence in core clause 61.3, "unless the *Employer* should have notified the event to the *Consultant* but did not".

Z8 Employer's limitation of liability

- Z8.1 The *Employer's* liability to the *Consultant* for the *Consultant's* indirect or consequential loss is limited to R0.00 (zero Rand)

Z9 Termination: Add to core clause 90.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

- Z9.1 or had a business rescue order granted against it.

Z10 Delay damages: Addition to secondary Option X7 Delay damages (if applicable in this contract)

- Z10.1 If the *Consultant's* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Consultant's* obligation to Provide the Services.
- Z10.2 If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in core clause 91. The payment on termination includes a deduction of the forecast of the additional cost to the *Employer* of completing the whole of the *services* in addition to the amounts due in terms of core clause 92.1.

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 *Consultant* or a third party, such party's employees, agents, or Subconsultants or Subconsultant'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 *Consultant*, or any member thereof in the case of a joint venture, or its employees, agents, or Subconsultants or the Subconsultant'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 Action** means any unlawfully or illegally intentional act or omission that misleads, or attempts 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 *Consultant's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Consultant* 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 *Consultant's* obligation to Provide the Services for this reason.
- Z11.3 If the *Employer* terminates the *Consultant'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 *Consultant* ensures that the Committing Party co-operates fully with an investigation.

Z12 Insurance

- Z12.1 Replace core clause 81 with the following:
 - 81.1 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.
 - 81.2 The *Consultant* 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	For the period following Completion of the whole of the services or earlier termination
Liability of the <i>Consultant</i> for claims made against him arising out of his failure to use the skill and care normally used by professionals providing services similar to the <i>services</i>	Whatever the <i>Consultant</i> deems necessary in respect of each claim, without limit to the number of claims	Whatever the <i>Consultant</i> deems fit and necessary but, Effective from the starting date; And, The period of the

		<p>cover, without derogating from or limiting the Consultant's liability to the Employer shall be determined by the Consultant. Although this period is at the discretion of the Consultant, the Employer recommends that the period following completion of the whole of the services or earlier termination be not less than five (5) years.</p>
<p>Liability for death of or bodily injury to a person (not an employee of the <i>Consultant</i>) or loss of or damage to property resulting from an action or failure to take action by the <i>Consultant</i></p>	<p><u>Loss of or damage to property:</u> The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible, as at Contract Date, where covered by the <i>Employer's</i> insurance</p> <p><u>Bodily injury to or death of a person:</u> The amount required by the applicable law.</p>	<p>The period of the cover, without derogating from or limiting the Consultant's liability to the Employer or any other Party shall be determined by the Consultant. Although this period is at the discretion of the Consultant, the Employer recommends that the period following completion of the whole of the services or earlier termination be not less than 12 (twelve) months.</p>
<p>Liability for death of or bodily injury to employees of the <i>Consultant</i> arising out of and in the course of their employment in connection with this contract</p>	<p>The amount required by the applicable law</p>	<p>But, Effective from the starting date; And, The period of the cover, without derogating from or limiting the Consultant's liability to the Employer or any other Party shall be determined by the</p>

		Consultant. Although this period is at the discretion of the Consultant, the Employer recommends that the period following completion of the whole of the services or earlier termination be not less than 12 (twelve) months.
--	--	--

81.3 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 *Consultant* or any other person against any and all liabilities which the *Consultant* 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 *Consultant* or any other person or the presence of the *Consultant* or that person or any property of the *Consultant* 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 *Consultant* or any other person, or the presence of the *Consultant* or that person or any property of the *Consultant* 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 *Consultant* 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 *Consultant*, 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 *Consultant* may perform Parallel Measurements and related control measures at the *Consultant'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 *Consultant'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 *Consultant* 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 *Consultant*

[Instructions to the tendering consultant: (delete these notes in the final draft of a contract)]

1. The tendering consultant is advised to read both the NEC3 Professional Services Contract, April 2013 and the relevant parts of its Guidance Notes (PSC3-GN)² in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 158 & 159 of the PSC3 April 2013 Guidance Notes.
2. The number of the clause in the PSC3 which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Whenever a cell is shaded in the left hand column it denotes this data is optional in PSC3 and would be required in relation to the option selected. The *Employer* should already have made the selection and deleted the rows not required.

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

Clause	Statement	Data
10.1	The <i>Consultant</i> is (Name): Address Tel No. Fax No.	
22.1	The <i>key people</i> are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities: Qualifications: Experience:	

² Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009 or www.ecs.co.za

Only if required		CV's (and further <i>key persons</i> data including CVs) are appended to Tender Schedule entitled .	
11.2(3)	The <i>completion date</i> for the whole of the <i>services</i> is	30 November 2028	
11.2(10)	The following matters will be included in the Risk Register		
11.2(13)	The <i>staff rates</i> are:	name/designation	rate
	Either complete here or cross refer to a schedule in Part C2.2	Refer to schedule C2.2	
25.2	The <i>Employer</i> provides access to the following persons, places and things	access to	access date
		1 Health and safety file that include a full protection plan	Starting date
		2 Quality assurance plan	Starting date
		3 Update staff authorisation file	Starting date
31.1	The programme identified in the Contract Data is		
50.3	The <i>expenses</i> stated by the <i>Consultant</i> are	item	amount
		Refer to schedule C2.2	
G	Term contract		
11.2(25)	The <i>task schedule</i> is in		

PART 2: PRICING DATA

PSC3 Option G

Document reference	Title	No of pages
C2.1	Pricing assumptions : Option G	[•]
C2.2	<i>Staff rates, expenses and the task schedule.</i>	[•]

C2.1 Pricing assumptions: Option G

1. How work is priced and assessed for payment

From Option G: Term contract

Identified and defined terms	11 11.2	(17) The Price for Services Provided to Date is, for each Task, the total of <ul style="list-style-type: none"> the Time Charge for work which has been completed on time based items on the Task Schedule and a proportion of the lump sum price for each other item on the Task Schedule which is the proportion of work completed on that item.
		(20) The Prices are <ul style="list-style-type: none"> the Time Charge for items described as time based on the Task Schedule and the lump sum price in the Task Schedule for each other item.

From the Core Clauses:

Identified and defined terms	11.2	(13) The Time Charge is the sum of the products of each of the <i>staff rates</i> multiplied by the total staff time appropriate to that rate properly spent on work in this contract.
------------------------------	------	--

and

Assessing the amount due	50.3	The amount due is <ul style="list-style-type: none"> the Price for Services Provided to Date, the amount of the <i>expenses</i> properly spent by the <i>Consultant</i> in Providing the Services and other amounts to be paid to the <i>Consultant</i> less amounts to be paid by or retained from the <i>Consultant</i>. <p>Any tax which the law requires the <i>Employer</i> to pay to the <i>Consultant</i> is included in the amount due.</p>
--------------------------	------	--

In effect Option G is a cost reimbursable form of contract with work ordered by the *Employer* on a Task by Task basis using the Task Schedule to compile the cost of carrying out a Task.

Expenses are calculated separately and added to the amount due for the services provided.

2. Staff rates and expenses

Tendering consultants are advised to consult the NEC3 Professional Services Contract Guidance Notes before entering *staff rates* into Contract Data, or in section C2.2 which follows.

This is because *staff rates* can be established in one of three ways:

- rates for named staff,
- rates for categories of staff, or
- rates related to salaries paid to staff.

Rate adjustment for inflation, if necessary, can be based either on actual salary adjustments or by using Option X1: Price adjustment for inflation. See pages 13 and 14 of the PSC3 Guidance Notes.

Expenses associated with employing a staff member in Providing the Services can be listed separately either by the *Employer* in Contract Data provided by the *Employer* or by the *Consultant* in Contract Data provided by the *Consultant*.

As only the *expenses* listed may be claimed by the *Consultant*, all other cost to the *Consultant* associated with Providing the Services must be included within the *staff rates*.

Rate adjustment for inflation of *expenses* is explained on page 15 of the PSC3 Guidance Notes.

3. The function of the Task Schedule

The Task Schedule may include items of work to be paid for on a rate (Time Charge) or on a lump sum price for the item. Any work ordered during the term of the contract – i. e. before the Completion Date – for which there is no priced item in the Task Schedule is priced using the compensation event procedure and the resulting Price is added into the Price List.

The *task schedule* is prepared by the *Employer* for the *Consultant* to price, or may be prepared jointly with the *Consultant*. It is typically priced in two parts as items of work to be carried out on a time basis and lump sum prices for other items of work. The task schedule must be as complete as possible and fully representative of all the work and *services* which the *Employer* may require the *Consultant* to carry out. The only unknown is when the work is to be carried out; the Task Order will be used to instruct when work to be done.

C2.2 Staff rates, expenses & the task schedule

1. The *staff rates* are:

No.	Designation (or category) or name of staff member	Rate per hour, excluding VAT
1	Marine/ SME Specialist	
2	Chief Engineer	
3	Senior Engineer	
4	Engineer	
5	Chief Technologist	
6	Chief Technician	
7	Senior Technician	
8	Technologist	
9	Technician	
10	Junior Engineer	
11	Junior Technologist	
12	Junior Technician	
13	General Worker	
14	Dive Team (consists of one diving supervisor, two divers and online attendant)	
15	Sea-going boat and diving ad-hoc services – excluding dive team)	
16	Cadet Technician	
17	Cadet Technician trainee	
18	Senior Administrator	
19	Administrator	
20	Safety Officer	
21	Skipper	

2. The *expenses* are:

No.	Expense item	Amount / rate excluding VAT
1	Economy class air travel (domestic and international)	As per National Treasury guidelines
2	Subsistence: meals and accommodation – 3 star or lower (domestic and international)	As per National Treasury guidelines

3	International and domestic business travel by rented car (class B or equivalent)	As per National Treasury guidelines
4	Domestic business travel by private car (exclude western cape resources)	Ref: Automobile Association of South Africa's rates per kilometre.
5	Airport parking fees	at net cost
6	Special Laboratory testing (when need arises)	5 x per year
7	Specialised tools and equipment – hire (when need arises)	5 x per year
8	Laboratory testing (when need arises)	5 x per year

The task schedule (Lump sum (Fixed Items) Activities

NO.	DESCRIPTION	Frequency	QTY per Year	Unit Price (Excl VAT)
Items of work priced on a lump sum basis (Frequency and quantity per year)				
1	Retrieve marine samples from Melkbos and report	On a 2 (two) monthly basis	6	
2	Retrieve marine samples from Springfontein and report	Quarterly	4	
3	Retrieve marine samples from Robben Island and report	Quarterly	4	
4	Retrieve marine samples from Dassen Island and report	Quarterly	4	
5	Exchange TLD's on Robben Island and report	Quarterly	4	
6	Deploy and retrieve temperature recorders at Melkbos and the round head of the southern breakwater and report	On a 2 (two) monthly basis	6	
7	Perform the photographic survey of the dollose and armarock structures on the breakwaters and report	5 yearly	1	
8	Levelling surveys of the breakwaters and report	Annually	1	
9	Crack width and scour depth monitoring of the breakwaters and report	Annually	1	
10	Aerial survey of the coastline from Melkbos to Springfontein and report	Annually	1	
11	Visual inspection of the marine structures and provide repair strategies and report	Annually	1	
12	Beach profile survey and report	Annually	1	
13	Monitoring tidal levels and long waves and report when the need arises.	Annually	1	
14	Underwater inspection to civil marine structures (outfall structures, SEC & CRF sea-facing walls & CFI complex area in front of rake screen- stopgate installation) and report	Outages	Per outage	

NO.	DESCRIPTION	Frequency	QTY per Year	Unit Price (Excl VAT)
15	Bathymetric surveys of the intake basin and report	quarterly	4	
16	Bathymetric surveys beyond the CWIB and report	Twice a year/every six months	2	
17	Perform an underwater laser survey of the dollose and armarock structures on the breakwaters	5 yearly	1	
18	Jellyfish monitoring on a required basis.	annual	1	

Notes:

- All work under the contract will be carried out by Task Order, as and when the Employer requires it, in its sole discretion.
- 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. No other price adjustments shall be allowed under the contract.
- Prices and rates are exclusive of VAT.
- Rates and prices are to be inclusive of all costs to provide the service as defined in the Scope of Work,

Items applicable to staff rates are FFD requirements and include the following:

- Provide overview of the coastal engineering, marine structures status, monitoring and activities in accordance with KWU-DE-018, this will also include and not limited to attending meetings, workshops, technical training, provide technical training, reviewing technical reports, specifications & procedures, analysis of survey results, analysis of dredging results. Provide KNPS with both hard and electronic copies of the report.
- Provide ad hoc consulting services and maintenance work in response to specific marine engineering issues and structures (i.e. compiling of feasibility studies, specification, perform analysis/ evaluation/ assessment of structures integrity, provide inputs/outputs to special projects & survey results & KOU structures).
- Compile KNPS Annual Marine Data Report. Provide KNPS with hard and electronic copies (the electronic copy to include data files such as Excel spreadsheets). The report to include sea water temperature, tide levels, bathymetric and aerial photographic surveys, marine sampling information.
- Compile Marine executive report on as and when required basis by KOU.

NOTES:

1. General

- a) All rates are to exclude VAT,

- b) All rates/prices are to be quoted in ZAR's (South African Rands),
- c) All rates will remain fixed for the first 12 months of the contract period; thereafter the applicable rate will be adjusted in accordance with **the applicable index**, base date is 30 days after tender closing.
- a) The individuals provided must work according to the *Employer's* normal working hours per day, as stipulated in the contract; and
- b) The *Supplier* must make provision to comply with all the conditions as stipulated in the Basic Conditions of Employment Act (BCEA) for all categories. The *Supplier* indemnifies the *Employer* against any claims, proceedings, compensation and cost arising from the *Supplier's* transgression of the Act.

2. Overtime, outage and non-outage related work:

Overtime, outage and non-outage related services can only be worked under the following conditions:

- a) Overtime payment will be based on the Direct Rate (DR) that the *Supplier* pays to the individual and will not be calculated taking into account any Cost to Company or Profit, Overtime will not be paid on any allowances that are added to the DR.

Overtime will be charged as follows:

Mon-Fri	Saturday	Sunday	Public Holidays
DR x Time x 1,5	DR x Time x 1,5	DR x Time x 2	DR x Time x 2

- b) Overtime will only be paid if the Task Order specifically makes provision for overtime,
- c) All overtime must be approved by the relevant *Project Manager /Employer's Representative*) prior to work commencement.

PART 3: SCOPE OF WORK

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

C3.1: EMPLOYER'S SCOPE

1. Description of the *services*

1.1. Executive overview

The objective is to provide KNPS with a coastal engineering overview as well as services associated with the marine structures in the intake basin and the outfall. This is to provide valuable monitoring, oversight, evaluation and analysis service to various departments which include Inspection & Test, Chemistry, Engineering, and Environmental Assurance/ Services, in order to maintain a continuous flow of water into the SEC (Essential Cooling Water) and CRF (Main Cooling water system) pumphouses of the CWIB. The scope are in accordance with URS- Marine -I&T /001

1.2. Scope of work

The *services* to be provided by Supplier are listed below.

1.2.1. Chemistry

- Retrieve marine samples from Melkbos (on a two monthly basis), Springfontein, Robben Island and Dassen Island (on a three monthly basis) in order to quantify the impact of the KOU on the marine ecological environment. Provide KNPS with both hard and electronic copy.
- Exchange TLD's (Thermoluminescent Dosemeter) on Robben Island (on a three monthly basis) in order to monitor any background radiological activity (when the need arises as per instruction from Koeberg). Provide KNPS with both hard and electronic copy.

1.2.2. Environmental

- Deploy and retrieve temperature recorders at Melkbos and the round head of the southern breakwater on a two monthly basis. Provide KNPS with both hard and electronic copy. The reasons for monitoring sea temperatures are:
 - To evaluate the possible impact of hot water discharge from the power station on the marine ecological environment.
 - To ensure that the heated water effluent does not leak through the main breakwater (comparison of seawater temperatures at intake and outfall) for overall operations control of the temperature regime of the entire cooling water system.
 - To provide updated information on extreme conditions, for safety and operating requirements.
- Marine life (i.e., jellyfish) monitoring as required or after sightings by public (when the need arises). The distance to be covered per survey will be as per instruction from the *Employer's Agent*.

1.2.3. Inspection & Test and Engineering

- Provide overview of the coastal engineering, marine structures status, monitoring and activities in accordance with KWU-DE-018, this will include and no limited to attending meetings, workshops, technical training, provide technical training, reviewing technical reports, specifications & procedures, analysis of survey results,

analysis of dredging results. Provide KNPS with both one hard and one electronic copies.

- Perform the photographic surveys of the dollose and armarock structures on the breakwaters as needed but at least every five years and in years where damage to the breakwater is observed and/or a particularly large storm event has occurred. The survey to be performed in accordance with KWU-DE-017. Compile KNPS breakwater stability monitoring report. Provide KNPS with hardcopy, electronic copy and original photos. The reason for survey is that breakwater damage is not always immediately obvious to casual inspection. Progressive settlement can occur over a long period before the effect is noted. This trend ensures that preventative maintenance action is implemented before significant level of damage occurs. The south and north of breakwaters are surrounded by the dollose on the sea-side to protect them from wave and sea. The south breakwater is 922m long and 578m long north breakwater.
- Perform an underwater laser survey of the dollose and armarock structures on the breakwaters as needed but at least every five years and in years where damage to the breakwater is observed and/or a particularly large storm event has occurred. Methodology to be submitted by the Consultant. Results of the survey shall be added to the KNPS Breakwater Stability Monitoring Report. Provide KNPS with hardcopy, electronic copy and original photos.
- Perform annual levelling surveys of the breakwaters for inclusion into the KNPS annual marine structure report to ensure that the structures fulfil their function in accordance with KWU-DE-018.
- Perform annual cracks width and scouring depth monitoring of the breakwaters for inclusion into the KNPS annual marine structure report to capture any changes in crack width or scouring depths to determine the cause and to specify remedial work, in accordance with KWU-DE-018.
- Provide ad hoc consulting service in response to specific marine engineering issues and structures (i.e. compiling of feasibility studies, specification, analysis, evaluation/ assessment of structures, provide inputs/ outputs to special projects).
- Compile KNPS Annual Marine Data Report. Provide KNPS with hard and electronic copies (the electronic copy to include data files such as Excel spreadsheets). The report to include sea water temperature, tide levels, bathymetric and aerial photographic surveys, marine sampling information.
- Conduct an annual aerial survey of the coastline from Melkbos to Springfontein, assess the condition and evaluate noticeable anomalies. Provide KNPS with original photographic records. The purpose is for monitoring of possible long-term erosion/accretion of adjacent beaches. The results of the survey are to be included in the KNPS Annual Marine Data Report.
- Perform an annual visual inspection of the marine structures (i.e., north and south breakwaters, revetment, outfall-structures, lateral-arm, SEC channels, sea-facing walls of SEC & CRF pumphouses) in order to assess the structural integrity and state of reinforced concrete and provide repair strategies and repair recommendations. The results to be included in the KNPS annual marine structure report.
- Perform underwater inspection to civil marine structures during outages (i.e. outfall, CRF and SEC pumphouses sea-facing walls, CFI complex-area in-front of rake screen stopgates installation areas) in order to assess the structural integrity and state of reinforced concrete and establish repair strategies in accordance with

KWR-IP-CIV-012. The results with recommendations to be included in the Outage report. During outages within this contract period.

- Monitor tidal level and long waves (measure, maintain data base for a data trending and analysis of results and generate a report) in order, to operate the intake pumps safely, specifically with regard, to minimum water level. The intake pumps are designed to operate safely at minimum water level of -1.75m MSL. When the instrument is available and installed.
- Perform beach profile survey on a quarterly basis. This entails monitoring the beach profiles along the same profile positions measured between 1970 and 1983 for the Koeberg site investigation in order, to create a directly comparable data base of beach levels since the 1970's. The purpose is for monitoring possible long-term erosion/accretion of adjacent beaches:
 - In case of the *Employer* being blamed by other parties of changes to the adjacent beaches the validity of such claims can be evaluated.
 - Preventative action where necessary to be specified.
- Perform quarterly bathymetric surveys of the intake basin (i.e., inner bathymetric survey) and evaluate the accretion of sand in the Cooling Water Intake Basin (CWIB). Provide KNPS with hard and electronic copies. The reason is for the management of the following:
 - Sedimentation and dredging in the basin.
 - Dredging quantity calculations which are used for payment of dredging contractor.
- Perform six monthly (coastal bathymetric survey) bathymetric surveys beyond the cooling water intake basin. Provide KNPS with hard and electronic copies. The reasons are for management of the dredged spoil sand (to assist with decision-making with regard, to where to discharge dredged sand) with the least impact on the environment and to assess damage to breakwaters.

Note: Diving activities to conform to standard of diving regulations, *Employer's* SHE specification, OHSA and Koeberg procedures.

Note: In an emergency a minimum response period (from notification to boat in the water and Koeberg site or to perform any marine monitoring tasks/activities) of two hours is required.

1.2.4. Deliverables

The *Consultant* shall provide *Employer* with the following deliverables before commencing the work.

- Health and Safety File
- Updated staff authorisation file (including divers as per diving regulation)
- Quality Assurance Plan.

Other deliverables:

- **Marine samples and sea temperature data recorders**
 - Marine samples (crayfish, abalone, black mussels, lobsters, line fish etc) are to be extracted and delivered to the Environmental Services Laboratory (ESL) at KNPS. The samples are to be taken in the sea preferably at the bottom or around the reef.
 - Sea temperature data is to be downloaded, evaluated, compared to previous data and included in the Annual Marine Data Report
- **Overview of marine structures**
 - Compile and provide Annual Marine Executive Report and provide KNPS with hard and electronic copies.
 - Attend and provide inputs to the quarterly co-ordination meetings
 - Provide inputs to all relevant procedures in all levels and designs
 - Compile civil maintenance repair procedures, specifications, feasibility studies when required by *Employer* and provide to KNPS with hard and electronic copies.
- **Breakwater inspections**
 - Provide original photographs of the dolosse which show the areas where damages or breakages occur.
 - Compile Annual Marine Data Report and provide KNPS with hard and electronic copies.
 - Include the crack width, scouring depths and levelling survey results in the Annual Marine Data Report.
 - A copy of the Breakwater Stability Monitoring and inspection reports to be forwarded to KNPS with original photographs.
- **Aerial survey of the coastline**
 - Copies of the photographs are to be retained by *Consultant* for future reference
 - Original photographs are to be supplied to KNPS.
- **Bathymetric surveys of the inner basin and coastal**
 - Hard and electronic copies of the contour plot, graphs, accretion volumes showing all the calculations of the bathymetric surveys are to be forwarded to KNPS.
- **Tidal level and long waves**
 - Recorded data is to be downloaded and included in the Annual Marine Data Report. Provide KNPS with hard and electronic data file such as Excel spreadsheet.
- **Beach profile survey**
 - Provide the report to KNPS and also include in the Annual Marine Data Report.
- **Outage report**
 - Provide the Outage report to KNPS.
- **Maintenance dredging in front of the SEC and CRF pump stations**
 - Provide data calculations and Outage report to KNPS.

Note: Deliverables shall be task order specific as and when required. All reports to be submitted with original photographs.

Note: The report for all Marine activities to be completed, approved and submitted to Eskom with 14 days after the completion of the marine activity.

All the reports to be signed by Engineers who are professionally registered with the Engineering Council of South Africa (ECSA).

1.3. Interpretation and terminology

Abbreviations used in this Scope:

Abbreviation	Meaning given to the abbreviation
ACP	Access Control Point
AP	Financial Accounting
CRF	Circulating Water System
CWIB	Cooling Water Intake Basin
ECSA	Engineering Council of South Africa
ICW	Instruction to commence work
KNPS	Koeberg Nuclear Power Station
LDV	Light Delivery Vehicle
MSL	Mean Sea Level
PAT	Plant Access Training
PPE	Personal Protective Equipment
PQE	Procurement Quality Engineering
PTW	Permit To Work
Q3	Quality Level 3
RFQ	Request for quotation
SAP	System Application Process
SEC	Essential Service Water System
SHE	Safety, Health and Environment
TLD	Thermo-Luminescent Dosemeter

2. Specification and description of the services

The services are the provision of continuous Marine Engineering monitoring, evaluation, maintenance of the marine structures and environment that serves Koeberg Nuclear Power Station.

The Marine structures comprises of the Cooling Water Intake Basin and Outfall structures.

2.1. Cooling Water Intake basin:

The Cooling Water Intake Basin has 26.5 ha. The inner basin is the zone between the lateral arm and pump houses. The inner basin is designed to act as a stilling basin to allow sediments stirred up in open sea conditions to settle before water is drawn into the pump house intakes. Sediment that settles out in the inner basin therefore has to be removed regularly by maintenance dredging. On completion of construction of the breakwaters the inner basin area was dredged generally to a depth of -6m MSL and directly in front of the pump house to -7.5m MSL. The side slopes of the excavated basin are revetted with rock.

The Cooling Water Intake Basin consists of the following:

- North and South Breakwaters
- Lateral arm
- Dollose
- Boat ramp/jetty
- Dredged inner basin
- Maintenance dredging area

2.2. Outfall structure:

Outfall structure is 2.0 ha. The outfall structure controls the discharge of cooling water back to the sea, to promote mixing and maximum cooling, minimum impact on the coastline and adjacent structure and protection of the upstream structures from wave attack.

Outfall structure consists of the following:

- Outfall Channel
- Wave Energy dissipater
- Rock revetments
- The reinforced concrete weir structure and reinforced concrete sheet pile channel.

The spoil from the maintenance dredging is discharged to the beach south and north of the basin, the area are 54.8 ha north and 59.4 ha south of breakwaters.

2.3. Specifications and data item descriptions:

238-103: Supplier Quality General Requirements

KGA-073: SHE Specification guide

KAA-501: Project Engineering Process for Koeberg Nuclear Power Station modifications

KAA-502: Project Management process for new facilities and changes to existing facilities at Koeberg Nuclear Power Station

KAA-815: Design changes to plant, plant structures or operating parameters

KAA-709: Process for performing safety justification

KGA-018: Safety Case Preparation

KGA-025: Screening and Safety evaluation guide

240-166151023 (KSA-128): Civil Preventative maintenance strategy for Koeberg Nuclear Power Station

OHSA No 85/93 Occupational Health and Safety Act, Act No. 85 of 1993

240-166150507 (KAA-672): Management of Non-licence binding (including SR structures) Civil surveillances at Koeberg Nuclear Power Station

240-166149425 (KAU-029): Basis and scope for non-license binding civil surveillances at Koeberg Nuclear Power Station

Diving Regulations, 2009, In terms of the Occupational Health and Safety Act, Act 85 of 1993

KGA-029: Safety Justification Preparations

KWU-DE-017: Photographic surveying of the dolosse on the breakwaters of the cooling water intake basin at Koeberg Nuclear Power Station

KWU-DE-018: Outfall structures and breakwater stability monitoring/blowhole maintenance

KAE-004: Marine Ecological monitoring programme at Koeberg Nuclear Power Station

KWR-IP-CIV-046: Visual inspection of the SEC pumphouse and galleries (structural integrity)

KGR-008 Guide to the analysis and classification of defects on civil buildings and structures

240-165425812 Civil Ageing Management Programme Requirements Manual (CAMPRM)

3. Constraints on how the *Consultant* Provides the Services.

3.1. Management meetings

Quarterly (4 times a year) meeting is scheduled for 1 hour at the *Employer’s* property.

The purpose of the meeting:

- Discussion of the overall co-ordination, other matters of a general nature, early warnings and any savings (designed to pro-actively and jointly manage the administration of the contract with the objective of minimising the adverse effects of risks and surprises for both Parties).
- Discuss all the activities scheduled for the next quarter.

Six monthly (twice in a month) meeting with Senior Managers is scheduled for 1 hour at the *Employer’s* property:

The purpose of the meeting:

- Discussion will be focusing on the items coming from the executive marine report and those that need management attention and focus.

Ad-hoc meeting i.e., outage readiness, outage wash-up (as required by the *Employer* and with the authorisation from the *Employer’s* Agent)

The purpose of the meeting:

- Discussion on an overall specialist activities as may required

Records of these meetings shall be submitted to the *Employer’s* Agent 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.

Regular meetings of a general nature may be convened and chaired by the *Employer’s* Agent as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	As per <i>Employer’s</i> Agent at 10h00	Koeberg Nuclear Power Station	Manager Inspection and Test & Employer’s Agent
Overall contract progress and feedback	Every 3 months at 10h00	Koeberg Nuclear Power Station	<i>Employer’s</i> Agent , <i>Consultant</i> and Chemistry, and Environmental Departments, Engineering
Ad-hoc activities/Outages/emergencies	Six monthly	Koeberg Nuclear Power Station	Inspection and Test - Manager, <i>Consultant</i> and affected departments from Koeberg

Meetings of a specialist nature may be convened as specified elsewhere in this Scope or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of

the *services*. Records of these meetings shall be submitted to the *Employer's Agent* 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.

Operational Meetings:

An operational meeting is held, by tele- or video conference if necessary, between the *Employer's Agent*, *Consultant* and the *Consultant's* project manager (appointed by *Consultant*) to monitor and control the tasks and planning processes during contract period. Typical topics for discussion at this meeting will include *Consultant's* reporting on the following:

- Review of Progress (Plan) with specific focus on Key Dates and interim milestones;
- Key Risks (threats) and Issues and, where applicable, identify and agree on associated preventive/contingent and recovery actions;
- Review of Actions List;
- Review of Communications.

3.2. *Consultant's* key persons

The following are additional above clause 22.1:

- The *Consultant* submits the relevant qualification, certificate of any professional registration body and experience of a proposed replacement to the *Employer's* for acceptance- including a list of similar projects demonstrating his/her competency and experience and organisational structure/ organogramme showing his/her lines of authority/communication. The *Employer* reserves the right to examine the certification.
- The *Employer* may, having stated, instruct the *Consultant* to remove a key person. The *Consultant* then arranges that, after one day, the key person has no further connection with the work included in this contract.
- The *Consultant* shall provide orientation and technical training for all key personnel in accordance with the requirements of the *Employer's* Radiological Safety Regulations, the *Employer* 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.
- The *Consultant* ensures that all key personnel assigned to the work in terms of the contract 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 shall also meet such requirements as the National Nuclear Regulator may stipulate from time to time.
- All Radiation workers shall comply with such radiation protection standards as may be required by the *Employer*. All divers shall comply with the diving regulations and other OHS Act.

The *Employer's* standard for management and control of supplemental workers at KOU is document in KSA-119.

The *Consultant* employs in and about the Provision of the Service only such persons that are careful, competent and efficient in their several trades and callings, to achieve nuclear safety, and the *Employer* reserves the right to object to and require the *Consultant* to remove from the

service, forthwith, any person employed by the *Consultant* in or about the Provision of the Service who, in the opinion of the *Employer's Agent*, misconduct's himself or is incompetent or negligent in the proper performance of his duties and such person is not again employed for the *service* without the written permission of the *Employer's Agent*.

The *Consultant*, in and about the Provision of the Service, provides evidence of skills assessment (including qualifications) for all its staff. *Consultant* project manager, QC and supervisors are required to present SAQA approved certificates (or equivalent), for the position that they fulfil. The *Consultant's* project manager is trained on the NEC PSC3 prior the *access date* stated on the Task Order. Any personnel that do not meet the panel requirements will have their access to the Affected Property revoked.

All report to be signed by Engineers who are professionally registered with the Engineering Council of South Africa (ECSA). All engineering work to be performed by experienced qualified engineers.

The *Consultant* ensures that the *Consultant's* employees are reasonably fluent in the language of the contract.

The *Consultant* 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.

While the tasks are performed on Affected Property, the *Consultant* ensures continuous on site supervision of the *service* by its supervisors.

3.3. Provision of bonds and guarantees

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Consultant* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Consultant* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Consultant* by the *Employer's Agent* to receive and accept such bond or guarantee. Such withholding of payment due to the *Consultant* does not affect the *Employer's* right to termination stated in this contract.

3.4. Documentation control and retention

3.4.1. Identification and communication

- All reports and documents supplied to *Employer* shall be in a hard copy and electronic format and is on Microsoft format (i.e. Word, Excel, and the like)(All the marine data including samples, temperature recorders, survey results, original photographs, contours plotted and volumes calculated must be forwarded to *Employer's Agent*).
- Electronic copies of text files shall be in '.doc' and drawings in '.dgn' format. All drawings and documents compiled for the services are sized to metric paper size standards (A4, A3 etc).
- Every documents must have a title, reference number, date and revision number

- The *Consultant* handles all formal communication between the *Consultant* and the *Employer* through the *Employer's Agent* or other person delegated in writing by the *Employer*.
- The *Consultant* conducts informal day-to-day oral communications with others as necessary for the purpose of Providing the Services.
- The *Consultant* maintains up to date record of the receipt and submission of all communication related to Providing the Services.

3.4.2. Retention of documents

All the documentation, reports, data, drawings and specifications shall be kept as per the period of 5 years and then be given to the *Employer* for record purposes.

3.5. Invoicing and payment

Clause 50.2 states invoices submitted by the *Consultant* include the details stated in the Scope to show how the amount due has been assessed.

- The *Consultant* ensures that the requirement in terms of Section 20(4)© of the Value Added Tax Act, No. 89 of 1991 (as amended by the Revenue Laws Amendment Act 45 of 2003), that the VAT registration number of the recipient of the tax invoice, appears on the said tax invoice in order for the invoice to fully comply with the requirements of a valid invoice for VAT purposes as contained in the said Section 20(4)©, is adhered to. The *Employer* requires adherence by the *Consultant* to this requirement, applicable from 1 June 2004. No payment will be made on tax invoices not fully meeting the requirement.
- The following details shall be shown on or attached to each Invoice to show how the amount due has been assessed:
- The *Consultant* shall address the tax invoice to:

Eskom Holdings Limited
Private Bag X10
Kernkrag
Republic of South Africa
7441

Attention: Financial Accounting (AP)

Or
Eskom Holdings Limited
R27 Off West Coast Road
Western Cape
Republic of South Africa
7441

Attention: Financial Accounting (AP)

- and include on it the following information:
 - a. Name and address of the *Consultant* and the *Employer's Agent*;
 - b. The contract number and title;
 - c. *Consultant's* VAT registration number;
 - d. The *Employer's* VAT registration number 4740101508;
 - e. Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;

- f. The date of the invoice
 - g. An Invoice number
 - h. Reference to Contract and/or Task Order/Purchase Order number
 - i. A descriptive title of the service covered by the invoice and/or the Contract's Assessment number
 - j. A copy of the Assessment Certificate/ Signed Task instruction
- To enable payment against each applicable Task Order the *Employer's Agent* and the *Consultant* signs next to each line acceptance of the service, materials or goods delivered on the applicable SAP generated Task Order. The signed copy of this SAP-generated Task Order is forwarded (faxed or hand delivered) to the Contracts Administration Section on site at +27 21 550 5298/9.
 - The original invoices will go directly to Financial Accounting (AP) group. The payment period will start from the date and time at which the invoice and all relevant documentation were received at this office.

3.6. Contract change management

- This section is deal with additional requirements to the compensation event clauses in section 6 of the core clauses which are:
- The *Employer* provides the *Consultant* with the signed PSC event register form notifying the compensation event. The *Consultant* signs the form and returns to the *Employer*. The *Employer* manages it via a SAP-45 document number.

3.7. Inclusions in the programme

- The programme shows all the information required by Clause 31.2.
- The programme incorporates the services and work (programme) of the Sub-consultants, the *Employer* and Others. The interfaces between Sub-consultants as well as the interfaces between Sub-consultants and the *Consultant* are clearly identified.
- Every programme has a revision number.
- The *Consultant* submits programme in a computerised planning package in MS project.
- The *Consultant* prepares and submits at the stated intervals, all programming documentation, the layout and level of detail of which is subject to the *Employer's Agent* acceptance.
- The *Consultant* makes allowance for incorporation of the *Employer's* acceptance review comments for documents delivered to the *Employer's Agent* for *Employer's* acceptance.

3.8. Quality management

3.8.1. System requirements

The scope of work is classified Q3/L3. The *Consultant* complies with the quality requirements of 238-103 Revision 2.



The *Consultant's* quality assurance programme is subject to the acceptance by the *Employer*.

The *Consultant* ensures that any sub-consultant employed by him has and implements a Quality Assurance Programme to meet the quality assurance requirements of the *Employer*.

The *Consultant* controls and supervises his Sub-consultant's quality plans. The *Consultant* reviews and accepts all plans, prior to submission to the *Employer's Agent*, for his acceptance. All Sub-consultant components are verified by the *Consultant's* technical representative(s) before use or installation.

Full details of all deviations from these specifications must be submitted to the *Employer* in writing for acceptance prior to development, production, or delivery of the *services*.

The *Consultant* informs the *Employer* in writing of any proposed changes to the quality assurance program, staff or resources that will affect the execution of the *services* in order to obtain the *Employer's* agreement prior to implementation of these changes.

If the Sub-consultant has to perform work in terms of the *Consultant* compiled quality plans, the Sub-consultant also reviews and accepts the use thereof. The *Employer's* standard for Quality Plans (QPs) is ISO 10005. QPs are submitted to the *Employer's* Agent for review and acceptance by the *Employer*. The *Consultant* obtains acceptance of the QPs from the *Employer's* Agent prior to the commencement of work. The QPs shall be project, process or control plans as appropriate. Subsequent changes to the *Employer* approved QPs shall require the *Employer's* agreement prior to the commencement of *services* involving an activity affected by such changes.

The *Employer* reserves the right to at any time audit and/or monitor the control between the *Consultant* and Sub-consultant, as well as the performance of the *Consultant's* Sub-consultant. Such audits are done by prior notification and in liaison with the *Consultant*.

The *Consultant* ensures that his staff and sub-consultants are conversant with the content of the *services* as defined by the Scope, quality control plans/work plans and work instructions.

The *Consultant's* authorisation of personnel (including sub-consultant personnel), applied for providing the *services*, is made available to the *Employer's* Agent prior to the start of the work for which the authorisation is done.

The *Consultant's* authorisation of personnel (including Sub-consultant personnel), as applied in Providing the Services, is made available to the *Employer's* Agent.

The *Consultant* ensures that his staff and Sub-consultant are conversant with the content of the *services* as defined by the Scope, quality plans, processes, procedures and work instructions and specifications.

The *Consultant* implements a qualification process for selecting Sub-consultants using a graded approach, taking into account the applicable safety and quality classification.

The *Consultant* submits the names of its Sub-consultants, as required by PSC core clause 24.2, to the *Employer's* Agent, for acceptance at least 4 weeks prior to commencement of work by the Sub-consultants.

The *Consultant* retains records of internal reviews performed by its personnel. The records provide objective evidence of who performed the review and the level of detail of the review. This requirement is also applicable to review of sub-consultant deliverables. Where considered necessary, the *Employer's* Agent may request such review records and the *Consultant* provides such information without limitation.

On instruction by the *Employer's* Agent, the duly authorised representatives of the *Employer* or the regulatory body are granted access to the *Consultant's* and his Sub-consultants' premises at reasonable times to monitor compliance with quality requirements and to participate in surveillances and inspections.

The *Consultant* ensures that documentation and records management principles are adhered to.

All quality related problems/issues are reported, and resolution agreed to by the *Employer*. Appropriate analysis is performed, and corrective and preventive actions implemented.

Final acceptance of the *services* is granted only after review of the reports that accompanies the *services*.

The *Employer* or his appointed quality assurance representative reserves the right of access to *Consultant's* facilities and records for the purpose of inspection or audit.

•

3.9. The Parties use of material provided by the *Consultant*

3.9.1. *Employer's* purpose for the material

- Clause 70.1 states that the *Employer* has the right to use the material provided by the *Consultant* for the purpose stated in the Scope.
- The *Employer* owns the rights and uses all documents and data for the sole purpose of all its needs.
- The *Employer* may submit, without restriction, all documentation to:
 1. The South African National Nuclear Regulator, or its nominated third party, for information and licensing purposes. The *Consultant* is informed in writing, by the *Employer's Agent*, if the NNR makes use of a third party for review.
 2. Others employed by the *Employer* and who have duly signed a confidentiality agreement with the *Employer*.
- The *Consultant* may not use any material provided by the *Employer* and/or Others for any other purpose than to Provide the Services. The *Consultant* may not copy and therefore not retain copies of any such material.

3.10. Restrictions on the *Consultant's* use of the material for other work

3.10.1. Confidentiality and publicity

- The exchange between the parties or the disclosure to third parties of information shall be subject to 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 *Consultant* agrees that neither the *Consultant* nor its Employees, Agents or Sub-Suppliers will make any public statements or release to any third party any information concerning the performance of any Task without first obtaining the written approval from the *Employer* which shall not unreasonably be withheld. Request to release information shall be co-ordinated through the designated *Employer's* Procurement Manager or the *Employer's* Power Station Manager or as otherwise specified in the ICW. The *Consultant* shall notify its Employees, Agents and Sub-Suppliers of this restriction.

3.10.2. Transfer of rights if Option X 9 applies

The third sentence of X9.1 requires that the *Consultant* provide to the *Employer* the documents which transfer these rights to the *Employer*. It would be sensible to specify here exactly what documents the *Employer* is expecting the *Consultant* to provide, and may be even in what form they are to be provided.

State any other constraints on the *Consultant* relating to the transfer of rights. For example that the *Consultant* shall not challenge or assist any other party challenging at any time the validity or ownership of any of the intellectual property rights relating to the material created and developed for this contract.

3.11. Management of work done by Task Order

- Option G clause 55.1
- A SAP task order, together with an instruction from *Employer* to perform a task, is the *Employer* notice to the *Consultant* to carry out a task.
- The *Consultant* does not perform any work without a SAP task order accompanying the *Employer* instruction to perform a task.

- The *Consultant* performing work without a SAP task order is done at the risk of non-payment by the *Employer*.
- The *Employer* may not issue a SAP task order after the completion date.
- To enable payment against each applicable Task Order the *Employer's Agent* and the *Consultant* signs next to each line acceptance of the service, materials or goods delivered on the applicable SAP generated Task Order. The signed copy of this SAP-generated Task Order is forwarded (faxed or hand delivered) to the Contracts Administration Section on site at +27 21 550 5298/9.

3.12. Health and safety

- Clause 25.4 states that the *Consultant* acts in accordance with the health and safety requirements stated in the Scope.
- The *Consultant* shall at all times comply with the health and safety requirements prescribed by law as they may apply to the *services*.
- A health and safety plan is submitted to the *Employer* for review and acceptance one week after the Contract date but in any event prior to the commencement of any work on site.
- The *Consultant* complies with the *Employer* SHE management system, Policy, standard and specification (Eskom level 1 Construction Safety, Health and Environment Procedure-reference 32-136 and must request it from the *Employer's Agent* on site establishment.
- The *Consultant* shall carry all work in accordance with all relevant safety laws and procedures.
- The *Consultant* shall supply Personal Protective Equipment (PPE) for his Employees. A hard hat, safety boots, ear plugs and safety glasses are mandatory safety equipment at the site.
- The *Consultant* provides the *Employer's Agent* with the following before work commence:
 - a. Health and Safety plan
 - b. Letters of appointment
 - c. Risk assessments of the tasks
 - d. Copy of the letter of notification
 - e. Some other documents requested by the *Employer* to perform the tasks.
- The *Consultant* ensures that all goods, services and works supplied in terms of this contract conform to all applicable environmental legislation and to the *Employer's* environmental specifications.

3.12.1. SHE Specification

The *Consultant* complies with the *Employer's* Level 1 Construction Safety, Health and Environment Procedure, number 32-136. SHE specification guidelines to which *Consultant* complies with are supplied by the *Employer*.

A project specific SHE file is to be created by the *Consultant* and submitted together with a completed copy of the Construction Regulations Checklist to the *Employer's Agent* for acceptance within 1 months of the *starting date* following which the *Consultant* maintains and updates the file.

It is to be noted that before any work can commence on the Affected Property, the *Consultant* must have performed a detailed risk assessment of the work to be performed and/or the work area where work is to be performed. The risk assessment is documented and discussed with

the parties involved with the work and is to be submitted to the *Employer's Agent* for acceptance.

Personnel protective clothing as specified in the Act for all work, except work in the radiological controlled zone, is provided and is kept in good order by the *Consultant*. A hard hat (with chin strap), safety boots, ear plugs and safety glasses are mandatory safety equipment at the Affected Property. Where work is to be performed on the 7,5m level Electrical Building, the *Consultant* provides arc-flash suits. Protective clothing for work in the controlled zone is prescribed and is supplied by the *Employer*.

3.12.2. *Employer's* lifesaving rules

The *Consultant* complies with the *Employer's* five rules as stipulated in the *Employer's* Management Directive 32-421. The *Employer* takes a ZERO TOLERANCE stance to violation of these rules:

- Rule 1: Open, isolate, test, earth, bond, and/or insulate before touch.
- Rule 2: Hook up at heights.
- Rule 3: Buckle up.
- Rule 4: Be sober.
- Rule 5: Permit to work.

3.13. Procurement

3.13.1. Other constraints

- The *Consultant* assigns suitably qualified personnel, where indicated by the *Employer* who are professionally registered with Engineering Council of South Africa (ECSA). The *Consultant* is to ensure that registration remains active for the contract duration.
- The *Consultant* personnel must be able to communicate in English.

3.13.2. Preferred subconsultants

- The *Consultant* assigns suitably qualified personnel, where indicated by the *Employer* who are professionally registered with Engineering Council of South Africa (ECSA). The *Consultant* is to ensure that registration remains active for the contract duration
- The *Consultant* appoints the sub-consultant to perform the work shall be competent in the field for which they are appointed and has resources to carry out the work in a safe and healthy manner.
- The *Consultant* must personally verify and ensure that only a skilled and properly authorised specialist is supplied to the *Employer*. The *Employer* reserves the right to examine the certification of appointed personnel/or sub-contractor.
- All staff must be able to communicate in English.

3.13.3. Subcontract documentation, and assessment of subcontract tenders

Addition to Clause 24:

- The *Consultant* shall supply the applicable the *Employer's* SHE specification to the subcontractors.
- The *Employer* ensures that the *Consultant* audit their subcontractors on their compliance with the approved SHE plan as per the requirements of the SHE file.
- The *Consultant* shall apply in accordance with SHE Specification Guideline.

3.13.4. Limitations on subcontracting

- The *Consultant* assigns suitably qualified personnel, where indicated by the *Employer* who are professionally registered with Engineering Council of South Africa (ECSA). The *Consultant* is to ensure that registration remains active for the contract duration
- The *Consultant* appoints the sub-consultant to perform the work shall be competent in the field for which they are appointed and has resources to carry out the work in a safe and healthy manner.
- The *Consultant* must personally verify and ensure that only a skilled and properly authorised specialist is supplied to the *Employer*. The *Employer* reserves the right to examine the certification of appointed personnel/or sub-contractor.
- All staff must be able to communicate in English

3.13.5. Correction of Defects

- If the *Consultant* does not correct a Defect in a manner which minimises the adverse effect on the *Employer* or Others, the *Employer* may, after first notifying the *Consultant*, have the Defect corrected by other people and the *Consultant* pays the *Employer's* costs of the correction.

3.14. Working on the *Employer's* property

3.14.1. *Employer's* entry and security control, permits, and site regulations

Fitness for duty management

The *Consultant* adheres to the *Employer's* procedure re. fitness for duty (FFD) requirements for vendors and suppliers 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 objective of the *Employer's* FFD programme is to provide reasonable assurance that the *Consultant'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.

The *Employer's* FFD process is designed to only allow the *Consultant'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.

FFD requirements before registration takes place

Information the *Consultant'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 *Consultant'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)

Activities to be performed before the *Consultant's* arrival at the Site

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
	<ul style="list-style-type: none"> • Recruitment & Selection 		X		<i>Consultant's</i> own planning	
	<ul style="list-style-type: none"> • ID Document 		X	Proof of identification is required before that the <i>Consultant's</i> employee is allowed to register on the FFD system.	<i>Consultant's</i> own planning	The following identification documents are the only documents that shall be accepted as proof of identification. <ul style="list-style-type: none"> • South African Identification Book issued by the Department of Home Affairs. (Green ID) or • Valid Official Passport or • Valid Temporary Identification Document issued by the Department of Home Affairs.
	<ul style="list-style-type: none"> • Proof of Residential Address 		X	Proof of residential address is required before that the <i>Consultant's</i> employee is allowed to register on the FFD system.	<i>Consultant's</i> own planning	The proof may not be older than 3 months when the <i>Consultant's</i> employee is enrolled on the FFD system.

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
	<ul style="list-style-type: none"> CV and Qualifications 		X	Authenticated qualifications to be presented before registration takes place	Consultant's own planning	<ul style="list-style-type: none"> CVs of <i>Consultant</i> employees are included in the documents where this is required by the procedure. The <i>Consultant's</i> employees must be in possession of his/her CV when he/she arrives on site to start the FFD process. The <i>Consultant</i> is required to verify the authenticity of the qualifications that is required for the work that is to be performed on Site. Eskom retains the right to verify any tertiary qualification that an applicant is required to have to work in a specific discipline. The <i>Consultant</i> ensures that his employee has the original (or certified copy) of the qualifications when he/she is registered on the FFD system. Persons not in possession of the qualifications required by the <i>Employer</i> are not considered for employment by the <i>Consultant</i> (in that particular discipline).
	<ul style="list-style-type: none"> Criminal History 		X	Assessment of criminal history	Consultant's own planning	<ul style="list-style-type: none"> Terminate Process Hold Point The criminal history of an applicant shall be assessed before access to the Site is considered. SA citizens obtain their criminal history reports from the South African Police (SAPS). The report may not be older than 3 months when the <i>Consultant's</i> employee is enrolled on the FFD system. This service is also available from the <i>Employer's</i> Security section. South African applicants are required to give their consent to the <i>Employer</i> to obtain the relevant information from the SAPS. Non South African citizens are required to provide proof of their criminal history. The criminal history report from their country's law enforcement agency or INPO (USA citizens only) is dated within three months of their required access date. Persons with a criminal background that is deemed to be a security risk to the Site are not to be considered for employment by the <i>Consultant</i>. The <i>Consultant's</i> employee will be in possession of the proof of criminal history when

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
						he/she arrives on site to start the FFD process.
	<ul style="list-style-type: none"> Complete Man Job Spec Form 	X	X	Consultant to complete with Employer	Consultant's own planning	<ul style="list-style-type: none"> The <i>Consultant</i> ensures that an occupational health services job specification form is completed, in conjunction with the <i>Employer</i>, for each of his employees and all signatures are obtained before the health assessment is arranged. These forms are obtainable from the <i>Employer</i> at Koeberg. The form identifies the work scope, the occupational hazards that the <i>Consultant's</i> employee will be exposed to and the physical attributes that are required for the execution of the tasks. The <i>Consultant's</i> employee will be in possession of the completed and signed occupational health services job specification form when he/she arrives on site to start the FFD process.
	<ul style="list-style-type: none"> Drug Test 		X	Negative drug test to be presented before registration takes place	Consultant's own planning	<ul style="list-style-type: none"> Terminate Process Hold Point <i>Consultant</i> ensures that their employees have been tested for drugs before they arrive on site to start the FFD process. Persons with a positive drug test result are not considered for employment by the <i>Consultant</i>. Persons with positive drug tests will not be allowed to register for the FFD process. The <i>Consultant's</i> employees must be in possession of the drug test results when he/she arrives on site to start the FFD process.
	<ul style="list-style-type: none"> Health Assessment 		X	Medical examination to be presented before registration takes place	Consultant's own planning	<ul style="list-style-type: none"> Terminate Process Hold Point The <i>Consultant</i> ensures that all his employees complete a health assessment before they arrive on site to start the FFD process. The occupational health services job specification form is required by the occupational health practitioner for the health assessment. Applicants that are not declared fit to do the work specified in the occupational health services job specification form are not allowed to register on the FFD system. Health assessment is only performed by <i>Employer</i>

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
						<p>registered Occupational Health Practitioners.</p> <ul style="list-style-type: none"> The health assessment report is not older than 3 months when the <i>Consultant's</i> employee is enrolled on the FFD system. <p>Persons that are not declared fit to perform the work specified in the occupational health services job specification form are not be considered for employment by the <i>Consultant</i>.</p> <ul style="list-style-type: none"> The <i>Consultant's</i> employee must be in possession of the medical assessment results and other relevant documentation when he/she arrives on site to start the FFD process.
	<ul style="list-style-type: none"> Work Permit 		X	Work permits to be obtained before registration takes place	<i>Consultant's</i> own planning	<ul style="list-style-type: none"> Terminate Process Hold Point Non South African Citizens are required to be in possession of the relevant Work Permit as required by the Immigration Act before access is considered. Persons not in possession of a valid work permit is not be considered for employment by the <i>Consultant</i>. The <i>Consultant's</i> employee must be in possession of the original work permit when he/she arrives on site to start the FFD process.
	<ul style="list-style-type: none"> Registration on FFD System 	X	X		<i>Consultant's</i> own planning	<ul style="list-style-type: none"> <i>Consultant's</i> employees are registered on the <i>Employer's</i> FFD system by a person appointed by the <i>Employer</i>. This could be a <i>Consultant</i> employee, if appointed by the <i>Employer</i>. <i>Employer</i> is responsible to arrange this activity. Registration is only performed if the <i>Consultant's</i> employee is in possession of all the documentation required for registration If the <i>Consultant's</i> employee is in possession of all the required documents, the individual will be registered and issued with a bar coded form.
	<ul style="list-style-type: none"> Training Requirements Form 	X	X	<i>Employer</i> and <i>Consultant</i> to supply	<i>Consultant's</i> own planning	<ul style="list-style-type: none"> The scope of each <i>Consultant</i> employee's work requirements are to be assessed to identify the training and/or technical assessments that are required before work may commence. All <i>Employer</i> training sessions includes an assessment at the

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
						<p>end of each session. Persons that do not pass any training assessments and/or technical assessments as identified for the scope of work are not allowed to continue with the FFD process and shall be required to leave the Site.</p> <ul style="list-style-type: none"> The <i>Employer</i> identifies any specific training needs of each individual or group of individuals (based on the planned work scope) and ensures compliance to the training requirements identified for the specific duties before access to Site is considered. The <i>Consultant's</i> employee must be in possession of the training requirements form when he/she arrives on site to start the FFD process.
	<ul style="list-style-type: none"> FFD Bookings 	X	X		<i>Consultant's</i> own planning	<ul style="list-style-type: none"> <i>Consultant's</i> employees are booked on the <i>Employer's</i> FFD system by a person appointed by the <i>Employer</i>. This could be a <i>Consultant</i> employee, if appointed by the <i>Employer</i>.
	<ul style="list-style-type: none"> Asbestos Training 		X	Training that the <i>Consultant's</i> employee must complete (only if required)	<i>Consultant's</i> own planning	Only if required
	<ul style="list-style-type: none"> Confined Space Training 		X	Training that the <i>Consultant's</i> employee must complete (only if required)	<i>Consultant's</i> own planning	Only if required
	<ul style="list-style-type: none"> Basic Rigging Training 		X	Training that the <i>Consultant's</i> employee must complete (only if required)	<i>Consultant's</i> own planning	Only if required. The <i>Consultant</i> verifies the validity of prior learning
	<ul style="list-style-type: none"> Non-Disclosure Agreement 		X	All <i>Consultant</i> employees are required to sign a non-disclosure agreement	<i>Consultant's</i> own planning	<ul style="list-style-type: none"> The <i>Consultant</i> ensures that a non-disclosure agreement is signed form is signed by each employee before the person is registered to start the FFD process. These forms are obtainable from the <i>Employer</i> at Koeberg.
	Security Permit Application	X	X	Employer and Consultant to supply	<i>Consultant's</i> own planning	The Consultant ensures that a security permit application form is completed for each employee, before the person is registered to start the FFD process. These forms are obtainable from the <i>Employer</i> at Koeberg.

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
						<p>It is important that the form is completed by the Consultant in conjunction with the <i>Employer</i>. The form identifies the security areas that the Consultant's employee is required to enter for the execution of the tasks.</p> <p>The Consultant's employees must be in possession of the security permit application when he/she arrives on site to start the FFD process.</p>

3.14.2. Medical examinations

Medical examinations are done by *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 *Consultant* is responsible for the cost of the examination.

3.14.3. Fraudulent documents

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

3.14.4. False declarations

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

3.14.5. FFD requirements after registration takes place

Activities to be performed after the *Consultant's* arrival at the Site

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
	<ul style="list-style-type: none"> Enrolment on FFD System 	X	X	<p><i>Consultant's</i> employees shall be enrolled on the <i>Employer's</i> FFD system by the Security Group</p>	10 min	<ul style="list-style-type: none"> A <i>Consultant's</i> employee will not be allowed to attend any further FFD activities if he/she is not enrolled on the FFD system and issued with a bar coded form.

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
				when they arrive on site.		
	<ul style="list-style-type: none"> Drug Test 	X	X	All the <i>Consultant's</i> employees are required to perform a drug test administered by the <i>Employer</i> . This test will be done notwithstanding the test done by the <i>Consultant</i> .	30 min	<ul style="list-style-type: none"> The <i>Consultant's</i> employees that fail the drug test are not allowed to continue further on the FFD process and will be required to leave the Site and will be denied access for at least 12 months.
	<ul style="list-style-type: none"> Criminal History Verification 	X	X	All <i>Consultant</i> employees that apply for a security permit to access the Site are required to give consent to the <i>Employer</i> to verify their criminal background. This activity is performed on site by the <i>Employer's</i> Security staff for South African citizens by the taking of a set of finger prints and forwarding same to the SAPS for verification.	30 min	<ul style="list-style-type: none"> South African citizens who have obtained their criminal records direct from the South African Police are only required to provide the <i>Employer's</i> Security staff with a set of fingerprints, for record purposes. <i>Consultant</i> employees with a criminal background that is deemed to be a security risk to Koeberg are denied access to the Site
	<ul style="list-style-type: none"> Health Verification 	X	X	<i>Consultant</i> employees are required to report to the <i>Employer's</i> Health Services section where the medical examination performed off-site will be verified to ensure that all requirements have been met.	30 min	The duration of this activity is approximately 30 minutes
	<ul style="list-style-type: none"> Induction Training including: <ul style="list-style-type: none"> SAT PAT FME (Generic) Human Performance 	X	X	<ul style="list-style-type: none"> Site Access Training (SAT) <i>Consultant</i> employees that are required to work outside the protected area of KNPS are required to complete the SAT course before work may commence. 	8 hours	<ul style="list-style-type: none"> Site Access Training (SAT) The SAT course is designed for persons working only in the OCA. Their security permits will not allow them access to the protected area of KNPS. <i>Consultant</i> employees that do not successfully complete the SAT course shall not be allowed access to the Site. Plant Access Training (PAT)

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
				<ul style="list-style-type: none"> Plant Access Training (PAT) <i>Consultant</i> employees who are required to work inside the protected area of KNPS are required to complete the Plant Access Training (PAT) course before work may commence. Foreign Material Exclusion Training (FME) <i>Consultant</i> employees coming to site that require access to FME zones or will perform any hands-on work on the plant are required to complete this training. Human Performance Training (HPT) <i>Consultant</i> employees that are required to work inside the protected area of KNPS shall complete the Human Performance Training (HPT) before work may commence. 		<p><i>Consultant</i> employees that do not successfully complete the PAT course are not allowed access to the Site.</p> <p><i>Consultant</i> employees required to perform work in the intake basin are required to pass the PAT</p> <ul style="list-style-type: none"> Foreign Material Exclusion Training (FME) <i>Consultant</i> employees that do not successfully complete the FME course are not allowed access to FME zones. Personnel required to perform hands-on work on the plant and for which FME was identified as part of the training requirements that do not complete the FME course successfully are not allowed access to the plant Human Performance Training (HPT) <i>Consultant</i> employees that do not successfully complete the HPT course are not allowed access to Site. <i>Consultant</i> employees required to perform work in the intake basin are required to pass the HPT course.
	<ul style="list-style-type: none"> Induction to Working at Heights / Material Handling 	X	X	<ul style="list-style-type: none"> <i>Consultant</i> employees are required to successfully complete the required Working at Heights/ Material Handling training before working at heights or handling 	8 hours	<ul style="list-style-type: none"> Only if required Failure to successfully complete the Working at Heights / Material Handling training will result in restriction to work at heights or handling material being prohibited

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
				material is considered.		
	<ul style="list-style-type: none"> Radiation workers Training 	X	X	<ul style="list-style-type: none"> Consultant employees are required to successfully complete the required radiation worker training before access to radiation zones is considered. 	3 days	<ul style="list-style-type: none"> Only if required Failure to successfully complete the radiation training shall result in access to radiation zones being restricted
	<ul style="list-style-type: none"> Induction to Confined Space 	X	X	<ul style="list-style-type: none"> Consultant employees are required to successfully complete the required confined space training before access to confined space is considered. 	2 hours	<ul style="list-style-type: none"> Only if required Failure to successfully complete the confined space training will result in access to confined space being restricted
	<ul style="list-style-type: none"> Induction to Asbestos Training 	X	X	<ul style="list-style-type: none"> Consultant employees are required to successfully complete the required Asbestos training before access to Asbestos zones is considered. 	1 hour	<ul style="list-style-type: none"> Only if required Failure to successfully complete the Asbestos training will result in access to Asbestos zones being restricted
	<ul style="list-style-type: none"> Induction to Basic Rigging 	X	X	<ul style="list-style-type: none"> Consultant employees are required to successfully complete the required Rigging training before rigging work is considered. 	8 hours	<ul style="list-style-type: none"> Only if required Failure to successfully complete the Rigging training will result in rigging work being prohibited
	<ul style="list-style-type: none"> Supervisor Training 	X	X	<ul style="list-style-type: none"> Consultant employees are required to work as supervisors must successfully complete the required Supervisor training before work is considered. 	2.5 days	<ul style="list-style-type: none"> Only if required Failure to successfully complete the supervisor training will result individual being prohibited to do supervision
	<ul style="list-style-type: none"> Technical assessment <ul style="list-style-type: none"> Mechanical Machining MC&I Electrical 	X	X	<ul style="list-style-type: none"> Consultant employees who are required to perform work of a technical 	4hrs - 16p 12hrs - 3p	<ul style="list-style-type: none"> Only if required The Employer is responsible to indicate the work that the Consultant's employee will be performing on the Site.

	Activity Description	Employer	Consultant	Requirements	Planning	Additional Notes
	<ul style="list-style-type: none"> Welding Pipe Fitting Civil TA 4 I&T MSS 			nature inside the protected area of Koeberg are required to perform technical assessments and be authorised to perform the work that they have been assessed for.	16hrs - 16p 8hrs - 4p 4hrs - 6p 6hrs - 4p 6hrs - 4p 8hrs - 4p	<ul style="list-style-type: none"> Consultant employees that do not successfully complete the technical assessment shall not be allowed to perform work on the Site. The duration of this activity depends on the type of work discipline and scope and is between 4 hours and two days.
	<ul style="list-style-type: none"> Final acceptance and Issuing permit 	X	X	<ul style="list-style-type: none"> All required FFD requirements are completed successfully before final acceptance is processed and a security permit is issued by the Security Group. 	30min	

3.14.6. Exit procedure

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

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

3.14.7. Security check point

- Prior to access to site, the *Consultant* passes through various security check points, viz. Entrance at the R27 access gate, entrance at the Duynfontein entrance and at ACP-1. All temporary worker/visitor permits are issued at ACP-1. When *Consultant* is the possession of a permit, the last entrance is ACP-2.
- On a daily routine all personnel will access and leave the Site via the security controlled access point, where all are subjected to security screening procedures including alcohol testing.

3.14.8. Vehicles and Tools/Equipment (as applicable)

- All tools and equipment are subject to a security screening before they are allowed on the Site. All tools and equipment must be listed and specified before they are brought on Site. This list will serve as evidence for removal permits. Vehicles will only be allowed on Site, if proof is provided to the *Employer* that there is a requirement, that such a vehicle is necessary to complete the Works.

3.14.9. Security

- All radiation workers shall prior to them being allowed to commence work in terms of the contract have satisfactorily passed the security screening by the *Consultant* in terms of the *Consultant's* own security regulations and the *Consultant's* conditions of employment.
- All the *Consultant's* personnel shall be subject and conform to the *Employer* and, to the *Employer* Nuclear Power Station's security system and processes.
- If requested by the *Employer*, the *Consultant* shall furnish the *Employer* with curriculum vitae, security records, police clearance and credit checks, and where applicable, medical records and radiation exposures histories of all personnel.
- A valid SA Identity document or a valid passport in respect of foreign nationals will be required for a security permit to gain access to the *Employer* premises.
- The violation of any security measures will result in the withdrawal of access permits.
- The *Consultant* shall remain responsible for the retrieval and return of all *Employer* security permits upon expiry of the contract or task order. A cost of R50 per permit will be levied on the *Consultant*, should the permits not be returned after the termination of the contract period.
- The *Consultant* shall ensure that all employees complete an exit process on the final day of employment.

3.14.10. Permit To Work (as applicable)

- All work performed is governed by the *Employer* PTW system and no work is allowed without this authorisation.

3.14.11. Emergency Mustering and Accountability and Evacuation

- Due to the nature of the site it is a requirement to have full accountability of all the personnel at all times. It is therefore required that the *Consultant* has and 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 *Consultant* ensures that his site supervisor takes full responsibility of this requirement and that he and his personnel are fully conversant with the mustering requirements as detailed in procedure KAA-611 that can be obtained from the documentation group on site.

3.14.12. Instruction to commence work (ICW)

- The work will be provided under an instruction to commence work issued by the *Employer* to the *Consultant*. The *Employer* will use of a SAP Purchase Order and a NEC task order form to issue a ICW. Each ICW will be performed under a separate Purchase Order/Task Order issued in accordance with the following procedures:
- The *Employer* will provide the *Consultant* with an outline of the works required in the request for quotation (RFQ).
- The *Consultant* shall submit a written proposal within the period requested by the *Employer*, which shall include:
 1. A detailed description of the approach the *Consultant* propose to follow in performing the works
 2. An estimate of the number of man-hours, equipment, materials, tools, things required to perform the works.

3. A schedule including milestones for completing works.
 4. An estimate of the cost involved and/or a lump sum where applicable
 5. The proposed organisation of the *Consultant's* personnel, identifying the key personnel that would be assigned to the task.
- If the *Employer* elects to accept the *Consultant's* proposal, the *Employer* shall issue an ICW.
 - Alternative, the *Employer* may issue an ICW or a revision thereof without first seeking a proposal from the *Consultant*.
 - The Task Order will include the following information:
 1. A description of the works
 2. Purchase Order number (SAP 4500...)
 3. Special terms and conditions that may be applicable
 4. Any specifications and drawings that may be applicable
 5. The *Employer* employee who will be the contact person for all the matters concerning the ICW, including technical direction.
 6. The contract number allocated to the contract.
 - Unless the *Consultant* notifies the *Employer* in writing within the period for reply, after the receipt of an ICW or any revision concerning same, that there is an aspect which is unclear, incorrect or unacceptable, the *Consultant* shall be considered to have accepted all the terms of the ICW as issued.
 - Any ICW that is not signed by the duly authorised Employee of the *Employer* shall be void and of no effect, and the *Consultant* shall not be compensated for any work performed pursuant to such ICW

3.14.13. Facilities

- The *Consultant* is liable for any damage incurred to the *Employer* facility during the period of occupation.
- The *Consultant* 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* facility.
- All expenses incurred by the *Employer* in the event of the *Employer* having to perform repairs, will be at a fee that is in line with the current building tariffs and be charged for the *Consultant's* account.

3.14.14. Canteen and snack bar

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

3.14.15. Telephones

- No cellular or mobile phones are allowed on site.
- The *Consultant* is responsible for payment of the total telephone account when the *Employer's* telephone account system is utilised by the *Consultant*.

3.14.16. Transport

- *Employer* transport is not available to *Consultant* employees and permission for access of a vehicle on the *Employer's* site must be obtained from Protective Services in advance

- **Safety:** It is the *Employer's* expectation that no passengers will be allowed to be transported on the back of the LDV's (bakkies) or trucks. Failure to adhere will result in access onto the *Employer's* site being denied.

3.14.17. Supply of personal computers (as applicable)

- The *Consultant* does not normally supply his own computing equipment. The normal arrangement is that the *Employer* makes available to the *Consultant* and maintains such equipment on his behalf for the duration of the contract. If, however, the Scope requires the *Consultant* to supply a personal computer(s)(PC) for the services, the *Consultant* submits a quotation at the starting date for a personal computer/s (PC), based on the following requirements:
 - a. The PC has sufficient capacity to run without limitation, the application required of it and as a minimum be capable of running the same version of MS window used at the *Employer's* site.
 - b. The PC is MS word compliant and is loaded with same version of MS Office suited used at the *Employer's* site.
- The *Consultant* exercises diligent control in the prevention and elimination of viruses and subjects his PCs to the *Employer's* anti virus software.
- Files produced by the PCs are compatible with the MS office suite of programmes used at the *Employer's* site.
- Should the PC require connection to the *Employer's* Local Area Network (LAN), the *Employer* supplies the connection point, the required network card (which will be signed for and returned after use) and arranges for its installation. *Consultant* PCs are typically "fire-walled" from the *Employer's* LAN.
- External internet connections are not supplied. Hardware and software maintenance is the responsibility of the *Consultant* at his own cost.
- The *Consultant* accepts full responsibility for, and therefore exercises tight control over the confidentiality and integrity of data held and used on his PC.
- The *Employer's* Microsoft license does not extent to the *Consultant*.

3.14.18. Electric power supplies

- Electric power for use during the works will be supplied free of charge to the *Consultant* and no connection fee will be levied. All electrical installations shall comply with the details set out in the applicable regulations. The *Employer* does not guarantee continuity of supply and no claims as a result of power failures will be considered.

3.14.19. Use of *Employer's* tools and equipment (as applicable)

- For the purpose of expediting the services, the *Employer* may make facilities available to the *Consultant* at no cost to the *Consultant*. The *Consultant* does not receive any reimbursement or make any charge relative to the beneficial use of the *Employer's* facilities or services.
- The *Employer* may allow the *Consultant*, for the Provision of Services, the reasonable use of its workshop, cranes, tools and equipment, provided that the *Employer's* own work and business are not interfered with in any manner because of such use. The *Consultant* leaves all workshops, cranes, tools and equipment in as good condition as he found them, fair wear and tear excepted, and is liable for and indemnifies the *Employer* against any damages suffered by the *Employer* as a result of any act of negligence by the *Consultant*, his employees or sub-consultant's while using such workshops, cranes, tools and equipment.

- The *Employer* may provide workshop and machining facilities to assist the *Consultant* with the Provision of the Services. The priority of work to be executed is determined by the *Employer* who also approves the manner of execution of work, which cannot be reasonable executed at the *Employer's* site workshop.
- Should the *Employer* on behalf of the *Consultant* undertake work, which is part of the works, the *Consultant* shall meet all charges levied by the *Employer*.

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

People restrictions

- Entrance to the Intake basin is a two-man rule meaning you are not allowed to be alone without any other person. The *Consultant* must at all the times keep the gates locked and the keys are obtained from the security at ACP-2 and at the completion of the work must be returned to the security at ACP-2 and signed off.

People conduct

- The *Consultant* maintains at all times a harmonious relationship with and co-operates with the *Employer* and all its suppliers and all its suppliers and sub-suppliers or their employees who may be involved.
- The *Consultant* employs in and about the Provision of the services only such person that are careful, competent and efficient in their several trades and callings and the *Employer* be at liberty to object to and require the *Consultant* to remove from the services forthwith any person employed by the Consultants in or about the Provision of the Services who, in the opinion of the *Employer*, misconduct's himself or is incompetent or 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*.
- The *Consultant* ensures that the *Consultant's* employees, Co-ordinators and employees are reasonably fluent in the language of the contract.
- The *Consultant* regularly reports person hours worked at the *Employer* on a monthly basis.

Hours of work

- It may be required that overtime be worked, this will be communicated to the *Consultant*.

On-line

Monday-Thursday

07H30- 16H35

Friday

07H30 – 13H30 (no lunch break)

Outage

Monday- Sunday

07H00 – 19H00 (day shift)

19H00- 07H00 (night shift)

Shift Regime

- Since there are a number of maintenance activities, which are directly related to outages, overtime and shift work may be required. This will be communicated by the *Employer's Agent* as applicable.

3.15. Cooperating with and obtaining acceptance of Others

In providing the services during this contract duration, the *Consultant*:

- Accepts that all work is subject to, at any given time, inspections various *Employer* groups i.e. Occupational Health & Safety, Engineering, Quality Assurance/Quality Control, Maintenance, Chemistry and Environmental Assurance.

- Shares the site with others and maintains a harmonious relationship at all times.
- Co-operates at any time with other appointed by the *Employer* to review work performed by the *Consultant* during this contract.
- Makes all the time the assignees and key persons available for providing the services.
- Brings to the attention of the *Employer* any additional services that the *Consultant* believes should be performed by him in keeping with sound professional practice.
- If has a different opinion or disagree or cannot resolve to his satisfaction with *Employer* of any matter, notifies the *Employer*.
- 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.
- Provides information as required by the *Employer* for issues affecting the services but outside the scope of the services.

3.15.1. Dealings with authorities and obtaining permits

- Each party shall responsible for all dealings with government and local authorities relating to its' role in terms of the contract and shall obtain and maintain at its' own expense such permits, licenses and authorisations as may be required in this regard.
- It is expressly agreed that the *Employer* shall be responsible for dealing with the National Nuclear Regulator

3.15.2. Co-ordination with work of others

- The *Employer's* responsibility is to co-ordinate the execution of the *Consultant's* work with the work of others *Consultant* on site.
- The *Consultant* co-operates with and does not delay, impede or otherwise impair the work of others.

3.16. Things provided by the *Employer*

Employer provides the *Consultant* during performance of the services with the following:

- Relevant training according to the contract scope and it is the responsibility of the *Consultant* to see that staff brought on site complete and passed to get authorisation.
- *Employer's* Agent arranges for all required training following prior written notice by the *Consultant* to the *Employer's* Agent.
- Arrange access to all relevant areas in accordance of this contract scope and to notify necessary department where required.
- Arrange and provide access to all relevant documentation and data required for the provision of the services. Also necessary equipment during marine samples, deploy and retrieve temperature recorders.

4. List of drawings

4.1 Drawings issued by the *Employer*

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Drawing number	Revision	Title
KBA 121 1K0 00 001	AA	Outfall work
KBA 00 14Q 00 015	Solo GPP	Gravity SEO/SEU SEO/SEU- Zone 9&12

5. Management strategy and start up

5.1 Programming Constraints

5.1.1 Plan constraints and requirements

The *Consultant* prepares and submits at the stated intervals, all programming documentation described in this section, the layout of which is subject to the *Employer's Agent's* acceptance.

All work performed at KOU are planned and scheduled in accordance with the requirements stated in:

- KLA-023 for outage related *service*
- KAA-721 (for non-outage related *service* – including pre-outage installation *service*).

Note that the above makes specific reference to the timelines to be adhered to for scheduling the work. As a general guide, outage work must be finalised and detailed SAP notifications, orders and operations raised on the *Employer's* SAP system at 6 months prior to the start of the outage; and for non-outage work, the SAP notifications, orders and operations must be raised 12 weeks prior start of work. "Finalised" means that the work plans and test procedures are completed, which include any related risks assessments associated with the work to be performed.

5.1.2 Planning constraints

The *Consultant* makes allowance for incorporation of *Employer / Employer's Agent* acceptance review comments for documents delivered to the *Employer's Agent* for his acceptance.

The *Consultant* does not plan for any *Employer* activities during the period of week 51, week 52 and week 1 of each year unless such a period falls within the implementation window of the *service*. Should any reviews be planned during this period, then the review periods need to be agreed, upfront, with the *Employer's Agent*.

During refuelling outages, the *Employer's* resources may be limited to perform acceptance reviews, and should any reviews be planned over outage periods, then the review periods need to be agreed, upfront, with the *Employer's Agent*.

5.1.3 Outage planning and integration

Outage work is limited to the *service* which can only be performed during the outage and *service* considered of too high risk (based on its accepted risk assessment) to be performed on-line (prior to outage).

On-line work is performed prior to the outage and the *Consultant* includes the activities on the Plan as well as makes the necessary planning allowances for it. On-line work is only be accepted subject to a *Employer's Agent* (and where applicable, *Employer*) accepted risk assessment.

To manage the occupancy of the Affected Property during implementation, the *Consultant* attends the "Table Top" meetings with the *Employer's* Outage representative in order to discuss area work load and to integrate and schedule the *Consultant's* activities as such as to allow sufficient space for implementation.

5.1.4 Outage start dates

The *Employer* may change the proposed outage implementation dates with no impact on the Prices within the framework described below:

- For *Employer* proposed delays to outage start dates in excess of 30 days, the *Employer* give 120 days notice;
- For *Employer* proposed delays to outage start dates in excess of 15 days, the *Employer* give 60 days notice;
- For *Employer* proposed delays to outage start dates between 7 and 15 days, the *Employer* give 45 days notice;
- For *Employer* proposed delays to outage start dates between 1 and 7 days, the *Employer* give 30 days notice; and
- For *Employer* proposed expediting (bringing forward) an outage start date, the *Employer* give 30 days notice for each week (7 days) from the start date on the accepted programme.

5.1.5 Outage readiness review

At 2 months prior to the allocated implementation Outage, the *Employer* performs a readiness review and if the *Consultant* is proven to not be ready in terms of KLA-023, the *Employer* has the right to allocate the *service* to another outage, with no cost impact to the *Employer*.

The *Employer's Agent*, in conjunction with the *Employer* holds a readiness review to assess the *Consultant's* overall readiness to implement the *service*.

Specific items that forms part of this review includes (but are not limited to):

- Documentation (site implementation file acceptance)
- Planning (detailed planning including resources and working times)

- Resources (qualification, training plan and mobilisation progress)
- Plant and Materials (delivered to the Affected Property and accepted/receipt inspected)
- Safety (risk assessments, mitigation and prevention, construction regulations)

Should the review conclude that the *Consultant* has substantially failed to meet the required dates or have failed to take subsequent corrective action to demonstrate a high level of confidence in terms of its readiness to implement the *service*, the *Employer* retains the right to reschedule the implementation of the *service* to the next opportune outage with no additional compensation due, by the *Employer*. It is hence critical that the *Consultant* ensures that dates as stated in the Task Order are adhered to and where deviations exist, that effective corrective action is taken to resolve any issue/delay.

6. General Constraints

6.1. Laws and regulations to be complied with

Specific laws to be complied with:

- The *Consultant*, at its own expense, complies with the Nuclear Energy Act 92 of 1982, the National Key Points Act 102 of 1980, and the Protection of Information Act 84 of 1982 and in general, with all laws, regulations, bye-laws and requirements of local and other authorities which may be applicable to the *services* and as amended or replaced.
- The *Consultant*, at its own expense, complies with the Occupational Health and Safety Act 85 of 1993.
- Where applicable, the *Consultant* complies with the *Employer's* Radiological Safety Regulations Programme, and in general, the whole framework of plant rules and regulations, which may be in force at the *Employer's* facilities from time to time.
- The *Consultant*, at his own expense, complies with the Basic Conditions of Employment Act 75 of 1997. The *Consultant* indemnifies the *Employer* against any claims, proceedings, compensation and cost arising from the *Consultant's* transgression of the Act.
- While on the Affected Property, the *Consultant* is at all times under the authority of the *Employer's* Power Station Manager for the purpose of giving effect to the provisions of the above. However, this does not in any way relieve the *Consultant* of his obligation to comply with the relevant legislation. Failure of the *Employer's* Power Station Manager to act in any specific manner does not make him or the *Employer* liable to the *Consultant* in any manner for any matter which may arise as a consequence of such failure to act.

7. Reporting culture

The *Consultant* is required to have a process or means by which the workers (all organisational levels) can report issues and incidences that negatively (or have the potential to) affect performance, without fear of retaliation or punitive action.

The *Consultant's* process must be such that the information is captured, analysed and the resulting corrective actions taken as a result of the reports are identified and tracked, for

implementation and improvement. All such reported issues are shared with the KOU, for purposes of capturing in the KOU Corrective Action Programme (CAP).

8. Specifications and data item descriptions

Documents which have relevance or serve as guiding reference, are:

Specific specifications and data item descriptions:	
32-421	32-421 Eskom cardinal rules - The <i>employer</i> takes a zero tolerance stance to the violation of these rules
238-103	Supplier Quality General Requirements
335-2	Koeberg Nuclear Power Station Management Manual
KGA-073	SHE specification guide
KSA-119	Contractor control at Koeberg Nuclear Power Station
32-136	Construction safety, Health and Environmental management
KAA-500	The process for controlled procedures
KAA-501	Project Management Process for Koeberg Nuclear Power Station Modifications
KAA-559	Contracting process
KAA-611	Emergency mustering accountability and evacuation
KAA-648	Administration and responsibilities for requalification testing
KAA-667	Processing a permit to work
KAA-672	Management of non-licence binding (including SR structures) Civil surveillances at KNPS
KAA-785	Safety, health and environmental audits at Koeberg Nuclear Power Station
KAE-004	Nuclear cluster marine warm water programme
KAU-029	Basis and scope for non-license binding civil surveillances at KNPS
KGA-067	Safety, health and environmental risk assessment guide
KGA-073	SHE specification guideline
KSA-011	The requirements for controlled documents
KSA-109	Requirements for access authorisation to Koeberg Nuclear Power Station
KSA-128	Civil Preventative maintenance strategy for Koeberg Nuclear Power Station
KWR-IP-CIV-046	Visual inspection of the SEC pumphouse and galleries (structural integrity)
KWU-DE-017	Photographic surveying of the dolosse on the breakwaters of the cooling water intake basin at KNPS
KWU-DE-018	Outfall structure and breakwater stability monitoring/blowhole maintenance
32-1033	Eskom's Procurement and Supply Chain Management Policy
32-1034	Eskom procurement and supply chain management procedure
GGP 0565	Projects / Expenditure Planning and approval Process
GGP 0215	Accounting Treatment of Plant Replacement and Renewal
GGP 0462	Quality requirements for Works Under Construction
GGD 1503	Generation contract Management Directive
OPR 3305	Plant Safety Regulations
OPG 0159-21	Generation evaluation of projects
ISO 9001	Quality Assurance
BS 6079 – 1	Project Management. Guide to Project Management
BS 6079 -- 2	Project Management. Vocabulary
BS 6079 – 3	Project Management. Guide to the Management of Business Related Risk.
OHSA	Occupational Health and Safety Act of 1993 of South Africa
NEC	NEC contract management principles.
PIP	The approved Project Implementation Plan.
General	Eskom Holdings SOC Ltd directives, standards and guides applicable to project management.
General	Best practices followed by the <i>Consultant's</i> fraternity
General	Generation Division's financial procedures and directives.

Specific specifications and data item descriptions:	
	Diving regulations 2009, In terms of the Occupational Health and Safety Act, Act 85 of 1993

The list above is indicative and may be updated or replaced during the course of the contract.

9. Termination of the contract

The Eskom has the right to terminate the contract in the condition that the supplier is unable to provide this service within a contract scope, time and quality.

10. Site information

10.1 Topographical

10.1.1 Location of the Site

The Site is located at Koeberg Nuclear Power Station (KOU) 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 KOU is indicated on the R27. KOU is approximately 30 km north of Cape Town and the approximate coordinates are 33° 40.7'S and 18° 26.1'E. After the turn off, the access route follows the main access road to KOU.

10.1.2 Security check points

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

ANNEXURE A: SUPPLIER DEVELOPMENT AND LOCALISATION (SD&L)

As a State-Owned Enterprise, Eskom is increasingly utilised as a front line implementation channel for the concept of a 'Developmental State'. This includes being tasked with achieving government socio-economic transformation and development objectives through its procurement spend. Suppliers will thus be required to contribute towards the six elements of Supplier Development and Localisation (SD&L) over and above PPPFA Regulations, namely BBBEE, Localisation, Industrialisation, Skills Development, Job Creation and Supplier Development elements. As such, the following strategy for the provision of Nuclear Quality Management Services at Koeberg Operating Unit shall apply:

(iii) **Skills Development:** The 3rd focus area (priority element) is the Skills Development (SD). The purpose of the SD Pillar is to achieve economic growth and social development that will enrich the creation of decent work and sustainable livelihoods for all South Africans. Further, the intent is to spread skills development spends and learnerships across the representation of race groups - with the provincial demographic adhered to.

Training and development is deemed a crucial part of any business and in the attainment of our national industrial capability. By virtue of being awarded this contract it provides a prime opportunity to give effect to experiential training (as well as theoretical as applicable) whilst performing the services on site.

The supplier are encouraged to propose Skills Development initiatives in terms of the skills required for this contract that includes the *upskilling of skills development candidates* in line with the NQF and SAQA unit standards {in accordance with the appropriate accreditation and unit standard as the focus will be on *certified formal training* (accredited training)} as appropriate for the **vocational training of relevant categories of labour utilised in marine monitoring services**. The service provider is required to develop the candidates directly. It is also to be noted that the composition of the candidates shall be representative of the population demographics of the Western Cape.

It is to be noted that the Amended Codes of Good Practice place a much greater emphasis on accredited training in general and learnerships in particular. That said, training and learning interventions can include **learnerships, internships** and vocational education and training. Learnerships are critical, both to the employed and the unemployed.

Note: the targets for skills development candidates categorically exclude Eskom employees and registered learners. The suppliers are required to take full responsibility for the total cost of developing the requisite skills, and Eskom shall not make any financial contribution towards the fulfilment of this obligation. Suppliers also are advised to approach their relevant SETAs to access grants, subsidies and incentives as well as South African Revenue Services for tax rebates that are earmarked for skills development initiatives.

Table 1: Skills Development Proposal

Category of Labour (Vocational Training)	Supplier Proposal
B.Sc (Marine Biology) or B.Tech (Marine Biology) Unemployed Graduate	
Junior Engineer, Civil Engineering and Civil Technician Unemployed Graduate (Coastal Engineering)	
Cadet Technician	
Cadet Technician Trainee	
Administrator (SAP capturing and update- computer literacy)	
