



**NEC3 Engineering and Construction  
Short Contract (ECSC3)**

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

**and**

**for Civil works to develop and construct facilities for  
the RPVCH replacement project**

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Q1/L3  
Quality Specification 238-103  
2021-09-15



**C1 Agreements & Contract Data**

**C1.1 Form of Offer and Acceptance**

**Offer**

The *Employer*, identified in the Acceptance page signature block on the next page, has solicited offers to enter into a contract to perform:

**Civil works to develop and construct facilities for the RPVCH replacement project**

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

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

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

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

Signature(s)

Name(s) \_\_\_\_\_

Capacity \_\_\_\_\_

**For the tenderer:** \_\_\_\_\_ *(Insert name and address of organisation)*

Name & signature of witness \_\_\_\_\_ Date \_\_\_\_\_

Tenderer's CIDB registration number:

## Acceptance

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

The terms of the Contract, are contained in:

- Part 1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
- Part 2 Pricing Data
- Part 3 Scope of Work: Works Information
- Part 4 Site Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the *Employer* during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the duly authorised representative(s) for both parties.

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

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

Signature(s)

Name(s)	Mr. Frikkie Ellis	_____
Capacity	Employer's Representative, Complex Projects	_____
<b>for the Employer</b>	Eskom Holdings SOC Ltd Koeberg Operating Unit R27, Off West Coast Road, Duynefontein 7441	_____

Name & signature of witness	_____	Date	_____
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**Note:** If a tenderer wishes to submit alternative tender offers, further copies of this document may be used for that purpose, duly endorsed, 'Alternative Tender No. \_\_\_\_\_'

## 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 .....

Capacity .....

On behalf of *(Insert name and address of organisation)* .....

Name & signature of witness .....

Date .....

.....

Mr. Frikkie Ellis

Employer's Representative, Complex Projects

Eskom Holdings SOC Ltd  
Koeberg Operating Unit  
R27, Off West Coast Road,  
Duynefontein  
7441

.....

.....

## C1.2 Contract Data

### Data provided by the *Employer*

Clause	Statement	Data
	<b>General</b>	
10.1	The <i>Employer</i> is (Name):	<b>Mr. Frikkie Ellis</b> for <b>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</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
	Tel No.	<b>+27 21 550 5202</b>
10.1 & 14.4	The <i>Employer's Representative</i> to whom the <i>Employer</i> in terms of clause 14.4 delegates his actions <sup>1</sup> is (Name):	<b>Xoliswa Motlhale</b>
	Address	<b>Koeberg Operating Unit R27, Off West Coast Road Duynefontein 7441</b>
	Tel No.	<b>+27 21 550 5426</b>
	E-mail address	<b>MotlhaXM@eskom.co.za</b>
11.2(11)	The <i>works</i> are	<b>Civil works to develop and construct facilities for the RPVCH replacement project</b>
11.2(13)	The Works Information is in	<b>The document called 'Works Information' in Part 3 of this contract.</b>
11.2(12)	The Site Information is in	<b>The document called 'Site Information' in Part 4 of this contract.</b>
11.2(12)	The Site is	<b>Koeberg Nuclear Power Station, Farm Duynefontein N° 1552, Melkbosstrand.</b>
30.1	The <i>starting date</i> is.	<b>2021- 11 - 01</b>
11.2(2)	The <i>completion date</i> is.	<b>2022- 01- 30</b>
13.2	The <i>period for reply</i> is	<b>2 (two) weeks</b>
40	The <i>defects date</i> is	<b>52 weeks after completion of the whole of works</b>
41.3	The <i>defect correction period</i> is	<b>One (1) week of date of notification.</b>
50.1	The <i>assessment day</i> is the	<b>Between the 24<sup>th</sup> and 25<sup>th</sup> day of each successive month.</b>
50.5	The <i>delay damages</i> are	<b>R 10 000.00 per day</b>

<sup>1</sup> Except those actions which can only be done by the *Employer* as a Party to the contract.

50.6	The retention is	10%																										
51.2	The interest rate on late payment is	zero percent above the publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by the Standard Bank of South Africa (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands																										
80.1	The <i>Contractor</i> is not liable to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property in excess of	The amount of the deductibles, in the amount of R500 000 (Five hundred thousand Rand) payable in terms of the <i>Employer's</i> Annual Construction All Risk Insurance Policy, available on request from Eskom Group Insurance.																										
82.1	The <i>Employer</i> provides these insurances from the Insurance Table	<table border="1"> <thead> <tr> <th colspan="2">INSURANCE TABLE</th> </tr> <tr> <th>Insurance against</th> <th>Minimum amount of cover or minimum limit of indemnity</th> </tr> </thead> <tbody> <tr> <td>Assets All Risk</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Project insurance</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Nuclear Public Liability</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Nuclear Material Damage and Business Interruption</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Nuclear Material Damage Terrorism</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>General and Public Liability</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Environmental Liability</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Transportation (Marine)</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Marine Small Craft Liability</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Motor Fleet and Mobile Plant</td> <td>As per the insurance policy document.</td> </tr> <tr> <td>Cyber Liability</td> <td>As per the insurance policy document.</td> </tr> </tbody> </table>	INSURANCE TABLE		Insurance against	Minimum amount of cover or minimum limit of indemnity	Assets All Risk	As per the insurance policy document.	Project insurance	As per the insurance policy document.	Nuclear Public Liability	As per the insurance policy document.	Nuclear Material Damage and Business Interruption	As per the insurance policy document.	Nuclear Material Damage Terrorism	As per the insurance policy document.	General and Public Liability	As per the insurance policy document.	Environmental Liability	As per the insurance policy document.	Transportation (Marine)	As per the insurance policy document.	Marine Small Craft Liability	As per the insurance policy document.	Motor Fleet and Mobile Plant	As per the insurance policy document.	Cyber Liability	As per the insurance policy document.
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		Insurance against	Minimum amount of cover or minimum limit of indemnity
		Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance.
		Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance.
		Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance.
		The <i>Contractor's</i> liability for loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) arising from or in connection with the <i>Contractor's</i> Providing the Service	<u>Loss of or damage to property</u> The replacement cost  <u>Bodily injury to or death of a person</u> The amount required by the applicable law.
		Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

82.1	The <i>Contractor</i> provides these additional insurances:	whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> .
82.1	The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the <i>works</i> , Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) caused by activity in connection with this contract for any one event is	whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> . Notwithstanding anything stated to contrary in the <i>Employer's</i> insurances, the insurance procured by the <i>Contractor</i> will be required to indemnify the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property in respect of the <i>Employer's</i> insurance deductibles in the amount of minimum of R25 M.
82.1	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands).
93.1	The <i>Adjudicator</i> is	The referring Party selects 2 (two) persons from the panel of NEC Adjudicators set up by the ICE-SA Division (or its successor body) of the South African Institution (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) and whose availability he has confirmed to act as the Adjudicator. The other Party selects 1 (one) of the 2 (two) nominees to be the Adjudicator within 4 (four) days, failing which the person chosen by the first party will be the Adjudicator. The parties appoint the selected Adjudicator under the NEC3 Adjudicator's Contract. If the Parties do not agree on an Adjudicator, the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
93.2(2)	The <i>Adjudicator nominating body</i> is:	The Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) or its successor body.
93.4	The <i>tribunal</i> is:	Arbitration.
	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 - if the Parties cannot agree a choice or - if the arbitration procedure 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.
	The <i>conditions of contract</i> are the NEC3 Engineering and Construction Short Contract (April 2013) <sup>23</sup> and the following additional conditions Z1 to Z11 which always apply:	
<b>Z1</b>	<b>Cession delegation and assignment</b>	

<sup>2</sup> If June 2005 Edition applies, delete April 2013 and insert June 2005

<sup>3</sup> State whether attached as a 'PDF' file in terms of Eskom's licence, or to be obtained from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or [www.ecs.co.za](http://www.ecs.co.za).



Z1.1	The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> .
Z1.2	Notwithstanding the above, the <i>Employer</i> may on written notice to the <i>Contractor</i> 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.
<b>Z2</b>	<b>Change of Broad Based Black Economic Empowerment (B-BBEE) status</b>
Z2.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.
Z2.2	The <i>Contractor</i> is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the <i>Employer</i> within thirty days of the notification or as otherwise instructed by the <i>Employer</i> .
Z2.3	Where, as a result, the <i>Contractor's</i> B-BBEE status has decreased since the <i>starting date</i> the <i>Employer</i> may either re-negotiate this contract or alternatively, terminate the <i>Contractor's</i> obligation to Provide the Works.
Z2.4	Failure by the <i>Contractor</i> to notify the <i>Employer</i> of a change in its B-BBEE status may constitute a reason for termination. If the <i>Employer</i> terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the <i>Employer</i> of completing the <i>works</i> .
<b>Z3</b>	<b>Confidentiality</b>
Z3.1	The <i>Contractor</i> does not disclose or make any information arising from or in connection with this contract available to others except where required by this contract. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the <i>Contractor</i> , enters the public domain or to information which was already in the possession of the <i>Contractor</i> at the time of disclosure (evidenced by written records in existence at that time). Should the <i>Contractor</i> disclose information to others where required by this contract the <i>Contractor</i> ensures that the provisions of this clause are complied with by the recipient.
Z3.2	If the <i>Contractor</i> is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the <i>Employer</i> .
Z3.3	In the event that the <i>Contractor</i> is, at any time, required by law to disclose any such information which is required to be kept confidential, the <i>Contractor</i> , to the extent permitted by law prior to disclosure, notifies the <i>Employer</i> 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 <i>Contractor</i> 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.
Z3.4	The taking of images (whether photographs, video footage or otherwise) of the <i>works</i> or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the <i>Employer</i> . All rights in and to all such images vests exclusively in the <i>Employer</i> .
Z3.5	The <i>Contractor</i> ensures that all his subcontractors abide by the undertakings in this clause.

<b>Z4</b>	<b>Waiver and estoppel: Add to clause 12.2:</b>
Z4.1	Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties or their delegates or the <i>Adjudicator</i> 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.
<b>Z5</b>	<b>Health, safety and the environment</b>
Z5.1	The <i>Contractor</i> undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the <i>works</i> . Without limitation the <i>Contractor</i> : <ul style="list-style-type: none"> <li>• accepts that the <i>Employer</i> may appoint him as the “Principal <i>Contractor</i>” (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health &amp; Safety Act 85 of 1993) (“the Construction Regulations”) for the Site;</li> <li>• warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health &amp; safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health &amp; safety in and about the execution of <i>works</i>; and</li> <li>• undertakes, in and about the execution of the <i>works</i>, to comply with the Construction Regulations and with all applicable health &amp; safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the <i>Contractor’s</i> direction and control, likewise observe and comply with the foregoing.</li> </ul>
Z5.2	The <i>Contractor</i> , in and about the execution of the <i>works</i> , complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his subcontractors, employees and others under the <i>Contractor’s</i> direction and control, likewise observe and comply with the foregoing.
<b>Z6</b>	<b>Provision of a Tax Invoice and interest. Add to clause 50</b>
Z6.1	The <i>Contractor</i> provides the <i>Employer</i> with a tax invoice in accordance with the <i>Employer’s</i> procedures stated in the Works Information, showing the correctly assessed amount due for payment.
Z6.2	If the <i>Contractor</i> does not provide a tax invoice in the form and by the time required by this contract, the time by when the <i>Employer</i> is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the <i>Employer</i> in terms of clause 51.2 is then calculated from the delayed date by when payment is to be made.
Z6.3	The <i>Contractor</i> is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the <i>Employer’s</i> VAT number 4740101508 on each invoice he submits for payment.
<b>Z7</b>	<b>Notifying compensation events</b>
Z7.1	Delete from the last sentence in clause 61.1, “unless the event arises from an instruction of the <i>Employer</i> .”
Z7.2	Add to core clause 62.3, “The <i>Employer representative’s</i> reply which is an acceptance of a quotation for a compensation event may require the due authority of the <i>Employer</i> .”
Z7.3	Add core clause 62.5, “The <i>Employer representative</i> notifies the <i>Contractor</i> if the <i>Employer’s</i> authority is required and includes in his notification any extension to the period within which he is required to reply to the <i>Contractor’s</i> quotation.

<b>Z8</b>	<b>Employer's limitation of liability; Add to clause 80.1</b>
Z8.1	The <i>Employer</i> liability to the <i>Contractor</i> for the <i>Contractor's</i> indirect or consequential loss is limited to R0.00 (zero Rand).
<b>Z9</b>	<b>Termination: Add to clause 90.2, after the words "or its equivalent":</b>
Z9.1	or had a business rescue order granted against it.
<b>Z10</b>	<b>Addition to Clause 50.5</b>
Z10.1	If the amount due for the <i>Contractor's</i> payment of <i>delay damages</i> reaches the limits stated in this Contract Data (if any), the <i>Employer</i> may terminate the <i>Contractor's</i> obligation to Provide the Works.
	If the <i>Employer</i> terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the <i>Employer</i> of completing the works.
<b>Z11</b>	<b>Ethics</b>
For the purposes of this Z-clause, the following definitions apply:	
<b>Affected Party</b>	means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i> or a third party, such party's employees, agents, or Subconsultants or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
<b>Coercive Action</b>	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,
<b>Collusive Action</b>	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,
<b>Committing Party</b>	means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,
<b>Corrupt Action</b>	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,
<b>Fraudulent Action</b>	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,
<b>Obstructive Action</b>	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
<b>Prohibited Action</b>	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 <i>Employer</i> may terminate the <i>Contractor's</i> obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the <i>Contractor</i> did not take timely and appropriate

	action to prevent or remedy the situation, without limiting any other rights or remedies the <i>Employer</i> 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 <i>Employer</i> can terminate the <i>Contractor's</i> obligation to Provide the Services for this reason.
Z11.3	If the <i>Employer</i> terminates the <i>Contractor's</i> 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 <i>Employer</i> does not have a contractual bond with the Committing Party, the <i>Contractor</i> ensures that the Committing Party co-operates fully with an investigation.
<b>Z12</b>	<b>Nuclear Liability</b>
Z12.1	The <i>Employer</i> 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.
Z12.2	The <i>Employer</i> is solely responsible for and indemnifies the <i>Contractor</i> or any other person against any and all liabilities which the <i>Contractor</i> or any person may incur arising out of or resulting from nuclear damage, as defined in Act 44 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the <i>Contractor</i> or any other person or the presence of the <i>Contractor</i> or that person or any property of the <i>Contractor</i> or such person at or in the KNPS or on the KNPS site, without the permission of the <i>Employer</i> or of a person acting on behalf of the <i>Employer</i> .
Z12.3	Subject to clause Z13.4 below, the <i>Employer</i> 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 <i>Contractor</i> or any other person, or the presence of the <i>Contractor</i> or that person or any property of the <i>Contractor</i> or such person at or in the KNPS or on the KNPS site, without the permission of the <i>Employer</i> or of a person acting on behalf of the <i>Employer</i> .
Z12.4	The <i>Employer</i> does not waive its rights provided for in section 30 (7) of Act 44 of 1999, or any replacement section dealing with the same subject matter.
Z12.5	The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.
<b>Z13</b>	<b>Communications</b>
Z13.1	Add to the end of the first sentence in core Clause 13.1:  "excluding communication by a communications protocol allowing the interchange of short text messages between mobile telephone / tablet devices and a store-and-forward method of writing, sending, receiving and saving messages over the internet."

**Data provided by the Contractor (the Contractor's Offer)**

10.1	The Contractor is (Name):	[•]
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	E-mail address	[•]
63.2	The percentage for overheads and profit added to the Defined Cost for people is  [The percentage for overheads and profit are applied to any change in the Defined Cost due to the compensation event. The percentage is required to cover all costs and overheads not included in the Defined Cost as well as an allowance for profit. This percentage is applied to Defined Cost for people.]	[•]%
63.2	The percentage for overheads and profit added to other Defined Cost is  [The percentage for overheads and profit are applied to any change in the Defined Cost due to the compensation event. The percentage is required to cover all costs and overheads not included in the Defined Cost as well as an allowance for profit. This percentage is applied to all Defined Cost except people.]	[•]%
11.2(9)	The Price List is in	<b>the document called 'Price List' in Part 2 of this contract.</b>
11.2(10)	The offered total of the Prices is [Enter the total of the Prices from the Price List]:	<b>R[•] excluding VAT [in words] [•] excluding VAT</b>

## C2 Pricing Data

### C2.1 Pricing assumptions

Entries in the first four columns in the Price List are made either by the *Employer* or the tendering *Contractor*.

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

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

All Prices are to be shown excluding VAT unless instructed otherwise by the *Employer* in Tender Data or in an instruction the *Employer* has given before the tenderer enters his Prices.

If there is insufficient space in the Price List which follows, state in which document the Price List is contained.

## C2.2 Price List

The Price List is as follows:

No.	DESCRIPTION	Unit	Qty	Rate	Amount
	<b>SECTION A: Preliminaries for work package 1- 5</b>				
A1	<b>Fixed</b>				
A1.1	Fitness for duty complete and safety file approved.	Item	1		
A1.2	Site establishment	Item	1		
A1.3	Scanning for known and unknown services	Item	1		
A1.4	Insurance for Works, <i>Contractor's</i> personnel, <i>Contractor's</i> Equipment and any other insurances the <i>Contractor</i> deems necessary to comply with the Contract and the law of the country.	Item	1		
A1.5	Test on Completion				
A2	<b>Time Related</b>				
A2.1	Project management and supervision	Month	4		
A2.2	Temporary <i>works</i> and plant- including access(scaffolding etc.), Office sheds etc.	Month	4		
A2.3	Protection of existing structures	Month	4		
A2.4	Transport	Month	4		
A2.5	Head office overheads	Month	4		
A2.6	PPE and compliance to Covid-19 regulations	No	1		
	<b>WORK PACKAGE 01: Alterations to LLW building (and or Bulk Dry Chemical Storage Facility at the LLW Complex)</b>				
	<b>OPTION 1: Storage of RPVCH at the Low Level Waste Building</b>				
B1	<b>Door Opening modification</b>				
B1.1	Breaking out of 500 mm concrete wall and cutting out of reinforcement at the main equipment entrance door(refer to the tech spec for details)	No	1		
B1.2	Removal of a roller shutter door and dispose	No	1		
B1.3	Reinstating concrete Cover including formwork and curing	No	1		
B1.4	Apply hydrophobic coating to the repaired area to door opening	No	1		
B1.5	Supply and Install 6000 (h) X5000 (w) mm steel chain operated Roller shutter door	No	1		
B2	<b>Beam modification</b>				

B2.1	Careful removal and setting aside of door a steel sliding door (Gridline EI)	No	1		
B2.2	Removal of overhead beam ( 5 m×0.3 m)	No	1		
B2.3	Reinstating concrete Cover including formwork and curing	No	1		
B2.4	Apply hydrophobic coating to the repaired area to door opening	No	1		
B2.5	Installation of the removable structural steel beam (PFC 200×76) as per the tech spec	No	1		
B2.6	Reinstatement of steel sliding door to interface with the new steel beam	No	1		
	<b>OPTION 2: Storage at Bulk Dry Chemical Storage Facility</b>				
B3	<b>Modifying the Dry chemical storage</b>				
B3.1	Removal of roof sheeting	No	1		
B3.2	Raise the existing reinforced concrete wall from 5140mm to 6640mm	No	1		
B3.3	Construction and installation of 43 precast concrete corbels	No	1		
B3.4	Construction and installation of 40 precast concrete roof panels	No	1		
B3.5	Construction of 4 x 1500 mm wide x 4770 mm high precast concrete shield panels	No	1		
	<b>WORK PACKAGE 02: Modifications to the precast concrete shield panels</b>				
C1	Modify existing panels to have coverage of up to a height of 5.5 meters as per the Section 6.2 of the URS	No	1		
	<b>WORK PACKAGE 03: Rigging of Unit 1 RPVCH in LLW Building</b>				
D1	<b>Rigging</b>				
D1.1	Setup a 500 ton Hydraulic Gantry system	No	1		
D1.2	Perform installation of Hydraulic Gantry system before load test	No	1		
D1.3	Perform Load test	No	1		
D1.4	Remove the RPVCH Shielding walls	No	1		
D1.5	Remove Seismic constraints	No	1		
D1.6	Lay the gantry rails	No	1		
D1.7	Lift the RPVCH	No	1		
D1.8	Relocate the RPVCH inside the bund wall	No	1		
D1.9	Remove gantry rails	No	1		
D1.10	Reinstate Seismic constraints	No	1		
D1.11	Reinstate shielding walls	No	1		
	<b>WORK PACKAGE 04: Geotechnical services/ studies (If required)</b>				
E1	<b>Survey</b>				
E1.1	Hard stand construction for the crane	No	1		



	<b>WORK PACKAGE 05: Seismic modelling and analysis of LLW building complex</b>				
F1	<b>Modelling &amp; analysis</b>				
F1.1	Structural modelling of the LLW building complex	No	1		
F1.2	Collect input information, build a model, analyse and produce results	No	1		
F1.3	Submit to the Employer a full analysis report containing all input data, assumptions, load cases, modelling philosophy, codes and standards, verification and validation, analysis, results and recommendations	No	1		

### PART 3: WORKS INFORMATION

Document reference	Title	No of pages
	This cover page	1
C3.1	<i>Employer's Works Information</i>	42
	Site Information	1
C3.2	<i>Contractor's Works information</i>	
	Total number of pages	44

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## C3: Works Information

### 1. Description of the works

#### 1.1. Introduction

Koeberg Nuclear Power Station (KNPS) will be replacing the Unit 2 Reactor Pressure Vessel Closure Head (RPVCH) with Control Rod Drive Mechanisms (CRDMs) and In-core Instrumentation System (RIC) connection cables in outage 225. The RPVCH with CRDMs and RIC connection cables project itself is divided into six Task Orders. Task order 6 pertains to the RPVCH installation and commissioning, and in order to support the RPVCH replacement project, a number of facilities and infrastructure need to be designed, developed and constructed.

The project team intends to temporarily store the RPVCH at the Low Level Waste complex (HQB) before it can be shipped off to Vaalputs for final disposal. Two possible storage locations exists in this complex, namely, the LLW building and Bulk dry chemical storage facility. The project team will make a final decision in due time on the final storage location and communicate this to the *Contractor* during contract scope clarification meeting. As such the *Contractor* is required to note and price for work activities required at both the proposed storage locations. The scope of this contract is therefore divided into option 1 and option 2. Option 1 of the scope of work is the storage at the low level waste building. Option 2 of the scope is the storage at Bulk Dry Chemical Storage Facility. For option 1, the *works* are divided into four work packages as follows:

- Work package 01: Modification of LLW building (and or Dry Bulk Chemical Storage Facility)
- Work package 02: Modification of the existing shielding walls
- Work package 03: Rigging of the unit 1 RPVCH into position to allow sufficient space for unit 2 RPVCH with CRDMs in the designated storage area
- Work package 04: Geotechnical services / studies (If required)
- Work package 05: Seismic modelling and analysis of the LLW building complex

The *works* will be located at the Site as depicted in Figure 1 below. The *Contractor* shall performs all activities necessary to Provide the Works until Completion is certified by the *Employer's Representatives*. This will include but is not limited to procurement, transportation, delivery, construction, contract administration, inspection, construction management, environmental management, commissioning etc.



Figure 1: LLW overview with its infrastructure

## 1.2. Interpretation and terminology

### 1.2.1. Abbreviations

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation
ACP	Access Control Point
ASL	Approved Supplier Listing
B-BBEE	Broad - Based Black Economic Empowerment
CRDMs	Control Rod Drive Mechanisms
CoC	Certificate of Conformance
DCP	Dynamic Cone Penetrometer
FFD	Fitness For Duty

<b>Abbreviation</b>	<b>Meaning given to the abbreviation</b>
GEM	Generation Environmental Management
HQB	Storage complex
KNPS	Koeberg Nuclear Power Station
LLW	Low Level Waste
MSDS	Material Safety Data Sheets
NEC	New Engineering Contract
OHS	Occupational Health and Safety
PPE	Personnel Protective Equipment
PQP	Project Quality Plan
QCP	Quality Control Plan
QMS	Quality Management System
QSE	Quality Safety Evaluation
RIC	In-core Instrumentation System
RPVH	Reactor Pressure Vessel Head
RPVCH	Reactor Pressure Vessel Closure Head
RP	Radiation Protection
SANS	South African National Standard
SARS	South African Revenue Service
SAHRA	South African Heritage Resource Association
SHE	Safety Health and environment
SME	Subject Matter Expert
URS	User Requirement Specification
SPMT	self-propelled modular transporter
COVID-19	Corona virus disease 2019 (The global pandemic)

### 1.2.2. Terminology

<b>Term</b>	<b>Description</b>
<b>Shall</b>	Denotes a requirement.
<b>Should</b>	Denotes a recommendation.
<b>May</b>	Denotes permission.
<b>Construction Health and Safety Agent</b>	A competent person who acts as a representative for the <i>Contractor</i> in managing health and safety on a construction project for the <i>Contractor</i> and who has satisfied the

Term	Description
	registration criteria of the SACPCMP to perform the required functions.
<b>Action of the Employer's Representative</b>	The actions the <i>Employer's Representative</i> has to perform in fulfilling their express duties, under the ECC.
<b>Non-Outage</b>	When the power station unit is operational
<b>Outage</b>	When the power station unit is shut down for maintenance and refuelling
<b>Design</b>	The process of devising a system, component, or process to meet the <i>Employer's</i> requirements, as specified in the Works Information. It is a decision-making process, in which the basic science, mathematics and engineering sciences are applied to meet the objective for the <i>works</i> .
<b>Designer</b>	<ul style="list-style-type: none"> <li>• competent person who: <ul style="list-style-type: none"> <li>- prepares a design;</li> <li>- checks and approves a design;</li> <li>- arranges for any person at work under his or her control to prepare a design;</li> <li>- an employee of that person where he/she is the employer; or</li> <li>- designs temporary work, including its components.</li> </ul> </li> <li>• an architect or engineer contributing to, or having overall responsibility for a design;</li> <li>• a building services engineer designing details for fixed plant;</li> <li>• a surveyor specifying articles or drawing up specifications;</li> <li>• a <i>Contractor</i> carrying out design work as part of a design and building project; or</li> <li>• an interior designer, shop-fitter or landscape architect.</li> </ul>
<b>Others</b>	<p>Others working on this project as required by the <i>Employer</i> are as follows:</p> <ul style="list-style-type: none"> <li>• NNR;</li> <li>• <i>Employer's</i> Authorise Inspection Agency;</li> <li>• <i>Employer's</i> consultants;</li> <li>• Consultants;</li> </ul> <p>The list is updated, by the <i>Employer's Representative</i>, each time a third parties contract is placed by the <i>Employer</i> or Others change.</p>
<b>Physical conditions</b>	Referred under Core Clause 60.1(9) means natural physical conditions and man-made and other physical obstructions and pollutants, which the <i>Contractor</i> encounters at the Site when executing the <i>works</i> , e.g. sub-surface, hydro-logical conditions, etc., but excluding weather conditions.
<b>Include</b>	If "include" is followed by other, specific, words it will not be construed as limiting the meaning of the general words preceding it, save where the word "similar" precedes the word "include".
<b>Including</b>	If "Including" is followed by other, specific, words will not be construed as limiting the meaning of the general words preceding it, save where the word "similar" precedes the word "including".



Term	Description
COVID-19	Corona virus disease 2019 (The global pandemic)

## 2. Scope of Work

### 2.1. Work package 01: Modification of the LLW Building (and or Bulk Dry Chemical Storage Facility at the LLW Complex)

#### 2.1.1. Option 1: Storage of RPVCH at the Low Level Waste Building

In order to store the RPVCH in this area the following work activities are required to be executed by the *Contractor*:

(Refer to figure 2 & 3 below for graphical representation):

- Removal of the existing door at gridline DI (Roller shutter door).
- Permanent increment of the height of the door opening at gridline DI from 5m to 6m
- Permanent removal of the overhead reinforced concrete beam (500mmx5000mm) at gridline EI and replacing with a removable structural steel beam (PFC 300x100).
- Removal of existing door at gridline EI (Metal Sliding door).
- Coating of the newly repaired concrete area by hydrophobic coating or equivalent (coating must be on applied on both sides of the wall and extend 1 m beyond the repaired area).
- Coating of the structural steel beam and associated anchorage.
- Installation of a new door at gridline DI.
- Reinstatement of the door at gridline EI.

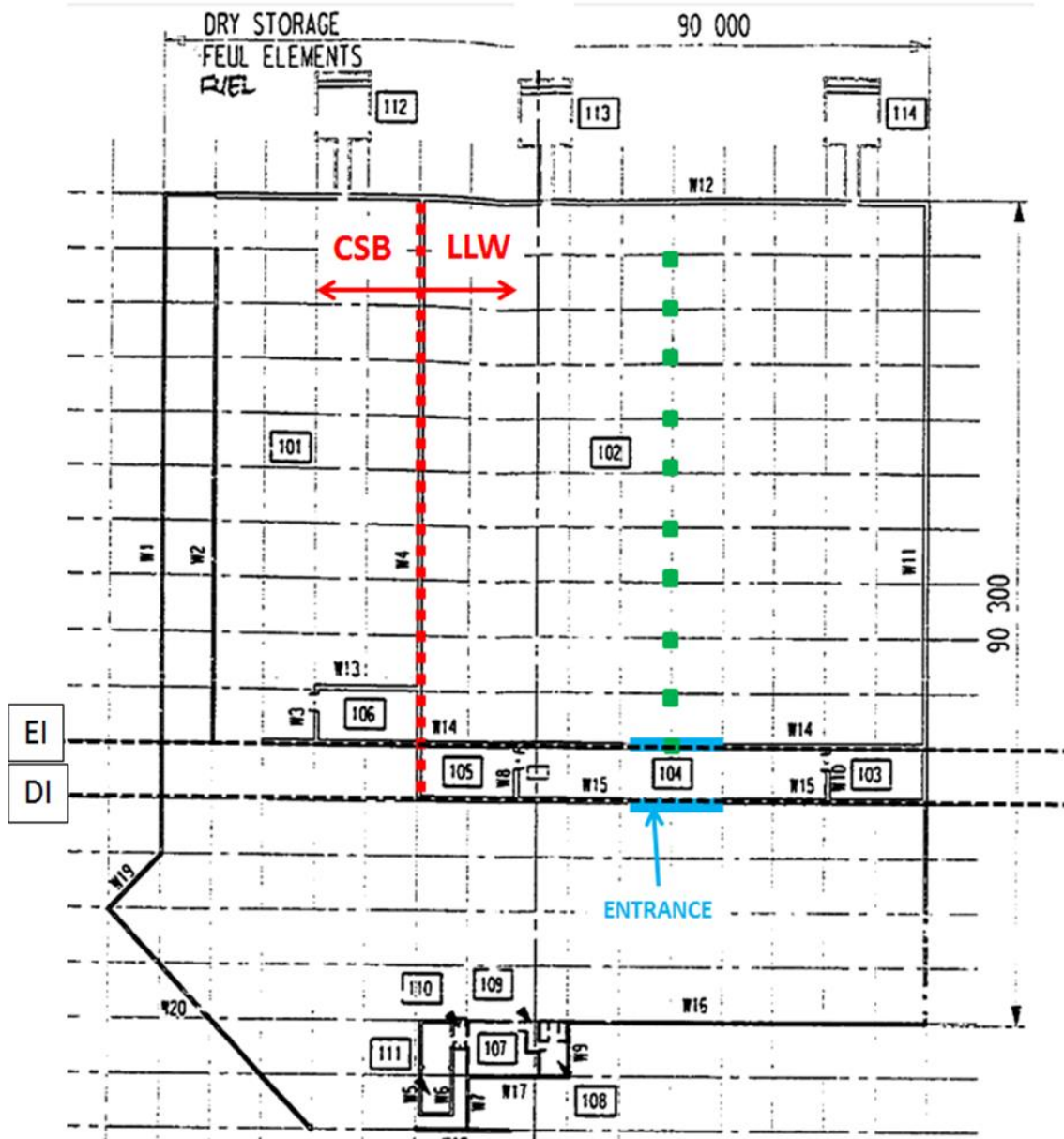


Figure 2: Plan View of the LLW complex (Gridline EI and DI)

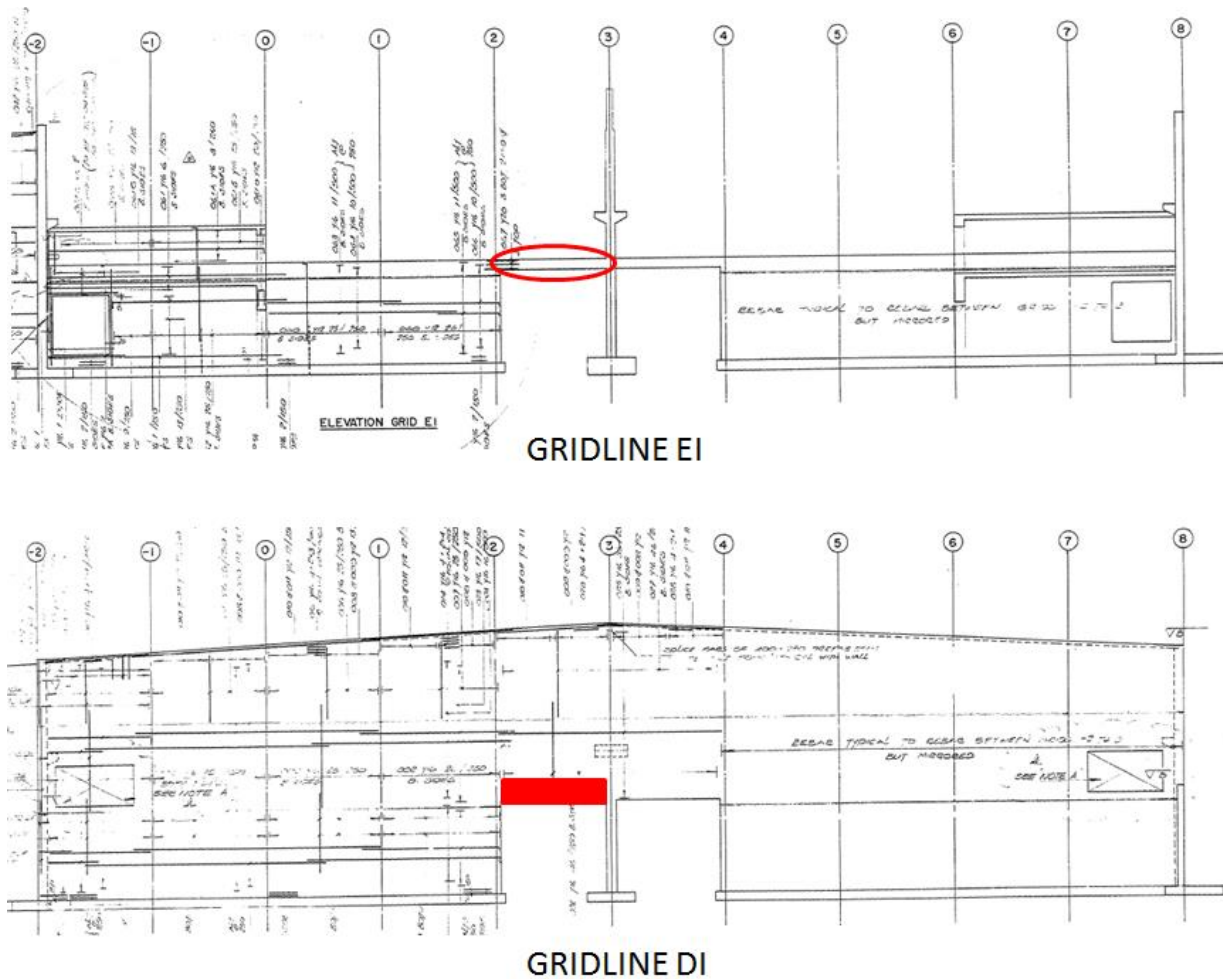


Figure 3: Elevation view of the LLW building and affected areas

### 2.1.1.1. Civil and Structural requirements:

Modification, performed by the *Contractor*, of the LLW building main Equipment entrance door shall meet the following requirements:

- The building entrance shall be enlarged to have a minimum opening of 6000mm in height and a width of 5000mm (same as existing).
- The overhead reinforced concrete beam parallel to the main entrance shall be removed and replaced with a removable structural steel beam (PFC 300x100) in order to assist with future removals of the RPVH.
- The *Contractor* shall perform rebar scanning of the areas where the steel beam will be anchored to the existing concrete columns. Chemical anchors or equivalent shall be used for anchorage.
- Where the anchorage into the columns is identified to interfere with the existing column rebar's via rebar scanning, *Employer's Engineer* shall be notified immediately for remedial actions. The *Contractor* is also afforded an opportunity to present an alternative solution.
- The overhead crane shall not operate during the period where the overhead reinforced beam is removed. The operations of the overhead crane shall resume after installation of the removable structural steel beam
- Corrosion resistant repair mortar shall be used to reinstate the concrete cover in affected areas. The minimum required cube strength of the repair mortar shall be 35MPa.

- During implementation of the *works*, the *Contractor* shall ensure that no damage is inflicted on the areas surrounding the affected areas.
- After curing of the repair mortar a hydrophobic coating or equivalent (coating must be on shall be applied on both sides of the wall and extend 1m beyond the repaired area).
- The *Contractor* to submit detailed method statements, quality control plans and risk assessments for all the work activities to the client prior to implementation of the *works* for review and acceptance.
- All *works* including temporary *works* shall be the responsibility of the *Contractor*.
- The *Contractor* is to verify all the dimensional requirements stated in this section during site walk downs and contract clarification meetings prior to commencement of any *works*.

### 2.1.1.2. Concrete Works

#### 2.1.1.3. Works required on Gridline DI.

The *works* required on Gridline DI, i.e. the main entrance/ opening in the structure are described below, and will be performed by the *Contractor* and inspected by *Employer's Agent* accordingly. The *Contractor*:

- Marks out the affected area that requires breaking out of the concrete as indicated in figure 4 below. The area to be broken out is approximately 1m (Height) x5 m (Width) x0.5 m (Thickness) reinforced concrete.
- Removes the existing roller door and break out the concrete.

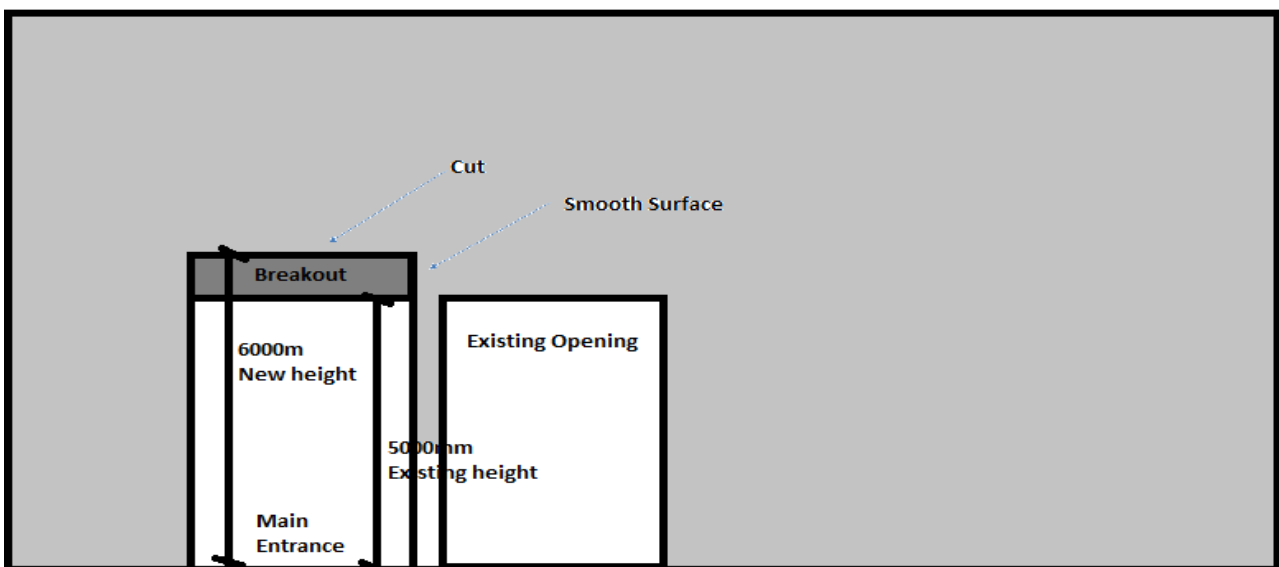


Figure 4: Marking out of the LLW Building Outer Wall (Gridline DI)

- Takes caution and ensure that no damage is inflicted on the immediate surrounding areas during execution of the *works*.
- The anticipated concrete strength of the affected area is 35 MPa which may have since increased over the years after commissioning of the building.
- After breaking out of concrete and cutting of insitu rebar in the affected area, the area is prepared, by the *Contractor*, for reinstatement of the concrete cover using an approved repair mortar. The concrete cover to be used is 50 mm.
- Provides the finishing similar as existing.
- After curing of the repair mortar the newly repaired area coats the area with corrosion resistant coating on the both the internal and external surface of the affected area.

- Executes concrete *works* in accordance with relevant SANS 2100 standards and manufacturers specifications.
- Submits all proposed products, to be used in the *works*, to the *Employer's Agent* for review and acceptance before commencement of any *works* can take place.
- Submit detailed method statements, Quality Control Plans and Risk Assessments for all the work activities to the *Employer's Agent* prior to implementation of the *works* for review and acceptance.
- All installation *works* shall be the responsibility of the *Contractor*.

#### **2.1.1.4. Works required on Gridline EI**

The *Contractor*:

- Removes door rail and associates anchored on overhead beam in gridline EI.
- Breaks/Cuts out the overhead reinforced concrete beam on gridline EI as indicated in figure 2 above.
- Cuts through the entire section of the beam and remove the entire beam safely.
- The *Contractor* shall take caution and ensure that no damage is inflicted on the immediate surrounding areas during execution of the *works*.
- Marks out and prepare the area where the new overhead removable steel beam is to be installed in accordance with requirements in drawing KBA 0003Y001000 Doc No: 136463– Overhead Beam (Low Level Waste Building) seen in Appendix 4.1.
- Sets out the coordinates and levels of bolts before installation.
- Installs removable overhead steel beam in accordance with drawing specification KBA0003Y001000 Doc No: 136463-Overhead beam (Low Level Waste Building) seen in Appendix 4.1.
- All structural steel, provided by the *Contractor*, shall be Grade S 355 JR.
- All steel *works*, performed by the *Contractor*, shall be coated in accordance with 331-170: Requirements for protective coatings for use at Koeberg Power Station.
- All the steel *works* to be done in accordance with SANS 2001-CS1 Structural Steelwork.
- Submits detailed method statements, quality control plans and risk assessments for all the work activities to the client prior to implementation of the *works*, to the *Employer's Agent*, for review and acceptance.
- All installation *works* shall be the responsibility of the *Contractor*.
- The *Contractor* is allowed to present an alternative solution to the proposed *works* for consideration and approval by the *Employer*.

#### **2.1.1.5. Doors**

The *Contractor*:

- Replaces and installs roller shutter door in gridline DI with a new sized door. The size of the new door shall be 5 m wide and 6m high.
- Reinstates and installs door rail on overhead structural steel beam in gridline EI.
- All steel *works* shall be coated in accordance with 331-170 Requirements for protective coatings for use at Koeberg Power Station.

#### **2.1.1.6. Radiation Protection Requirements**

- All waste generated from the *works* shall be managed by *Contractor* in accordance with radiation protection procedures (KWH-S-033 and 37) and standards (KAA-634, 238-51 and 238-54).
- All *Contractor* workers working in this area shall undergo radiation protection training.

#### **2.1.1.7. Fire Requirements**

During execution of the *works*, the existing fire detection and suppression system in the building shall be supplemented by localised fire extinguishers in the affected areas. The fire extinguishers shall be supplied by

the *Contractor* in terms of construction regulations, *Contractor* Health and Safety Requirements 32-136, Construction Regulations 29 -Fire precautions on construction site, *Contractor* Health and Safety Requirements 32-136, KGA-073 Rev 6-SHE specification Guideline, 335-5 Rev 4-SAFETY, HEALTH & ENVIRONMENTAL (SHE) INDUCTION.

## 2.1.2. Option 2: Storage at Bulk Dry Chemical Storage Facility

The following is included for as part of the Prices:

The *Contractor* is required to provide pricing for the *works* using the scope described below as well as the drawing (Concept drawing for Bulk dry chemical storage) in Appendix 4.2. The *Contractor* should note that the scope and the drawings described and or referenced in this section are based on concept drawings and a detail design as well as drawings" issued for construction" are still to be supplied by the *Employer* in due time. The *Contractor*:

- Removes the fibre (to be confirmed by the *Employer* if it's Asbestos) roof sheeting and associated fixtures from the building.
- Raises of the existing reinforced concrete wall from 5140mm to 6640mm (a total height increase of 1500mm) in accordance with concept drawing (Bulk dry chemical storage) in appendix 4.2.
- Constructs and installs 43 precast concrete corbels in accordance with concept drawing (Bulk dry chemical storage) in appendix 4.2. The corbels shall be 600mm deep x 600 mm wide x 600 mm long. The corbels shall be used to support the precast concrete roof panels.
- Constructs and installs 40 precast concrete roof panels in accordance with concept drawing (Bulk dry chemical storage) in appendix 4.2. The panels shall be 1500mm wide and 6000 mm long and 500 mm thick. The concrete panels shall be furnished with an additional 150 mm concrete screed.
- After curing of the concrete screed the roof shall be furnished, by the *Contractor*, with a UV resistant waterproofing.
- In addition to the roof precast panels, the *Contractor* shall construct 4 x 1500 mm wide x 4770 mm high precast concrete shield panels that will serve as shielding partitions to the balance of the structure. Refer to concept drawing for Shielding Barriers in Appendix 4.3 for layout details and specifications.
- All the concrete *works* shall have 35MPa strength.

### 2.1.2.1. Verification and Tests

The following verifications and test are to be performed by the *Contractor*. Verification and tests applies to both the options stated above.

- The *Contractor* shall measure the clear distance between the supports before and after removal of the beam and confirm opening of 5 m is still achieved.
- The *Contractor* shall inspect the affected areas prior to commencement of the *works* for cracks and notify the *Employer*. The *Contractor* shall ensure that the affected areas and surrounding are free of cracks after completion of the *works*.
- Installations shall be inspected and tested in accordance with the project specifications, reference documentation, detailed drawings and the manufacturer's specifications, instructions and recommendations.
- Verify concrete placing and test records including:
  - slump tests verification against concrete mix designs
  - concrete cube tests records to verify compressive strength of hardened concrete
- Verify that the curing of concrete (in accordance with approved curing method statement), is done immediately after the concrete is placed.
- Verify that all concrete defects are repaired subsequent to the removal of formwork.
- The Site supervisory authority is to provide an occupation certificate after all *works*, verifications and testing has been completed and approved.



## 2.2. Work package 02: Modification of the existing Pre - Cast Concrete Shield Panels

The *works* is the modification of the existing pre - cast concrete shield panels to accommodate Unit 2 RPVCH with CRDMs cut in half inside the LLW building. The *Contractor* shall modify the existing shield panels to have coverage of up to a height of 5.5 meters as per section 6.2 of the URS NPM21/008. The elevation view for the existing pre-cast concrete shield panels is indicated in Figure 5 below:



**Figure 5: Pre - Cast Concrete Shield Panels at Low Level Waste**

- The *Contractor* shall modify and construct 50 pre-cast concrete shield panels similar to those shown in Figure 5 above.
- Each pre-cast concrete shield panel has the following dimensions: 500mm (Width) X 2100mm (Height) X 300mm (Thickness). The *Contractor* shall verify the dimensions provided and any other information it deems necessary via a walk-down prior to commencement of any *works*.
- A minimum specified concrete strength of 25 MPa is required.
- The concrete, provided by the *Contractor*, will have a coarse aggregate size of at least nominal 19 mm.
- The *Contractor* submits method statements, quality control plans and risk assessment for all construction activities involved in the *works*.
- The following SANS standards shall be used, by the *Contractor*, for the construction and modification of the pre - cast concrete shield panels:
  - SANS 10400: Building regulation
  - SANS 10160 -1: Basis of structural design
  - SANS 10160 – 2: Self weight and imposed loads
  - SANS 10100-1: Structural use of concrete
  - SANS 2001 – CC1: Concrete *works* structural

## 2.3. Work package 03: Rigging of the unit 1 RPVCH into position to allow sufficient space for unit 2 RPVCH in the designated storage area in LLW building

The *Contractor* shall provide a rigging supervision as well as rigging plan as per KSA-132 that will be accepted by the *Employer*. The *Contractor* shall perform the following activities for the relocation of the Unit 1 RPVCH inside the bund wall in the LLW building:

- setup a 500 ton Hydraulic Gantry system
- perform installation of Hydraulic Gantry system before load test

- perform Load test
- remove the RPVCH Shielding walls
- remove Seismic constraints
- lay the gantry rails
- perform lifting of RPVCH
- to relocate the RPVCH inside the shielding walls
- to perform demobilization

**Note:** *Employer's* rigging team shall perform an oversight of all rigging activities. The *Contractor* notifies the *Employer's Representative* two days before rigging will be performed.

#### **2.4. Work package 04: Geotechnical services / studies**

The *Contractor* shall perform survey on the area close to the dry chemical stores so to see if the crane will be able to stand when it lowers the unit 2 RPVCH into the Dry chemical stores.

#### **2.5. Work package 05: Seismic modelling and analysis of LLW building complex**

- The *Contractor* is required to perform a structural modelling of the LLW building complex in order to qualify it into a seismic class building.
- The *Contractor* is to collect input information, build a model, analyse and produce results to the client.
- Furthermore, the *Contractor* shall recommend suitable strengthening solutions for members that are overstressed when exposed to the seismic action.
- The building is to be subjected to an earthquake with a magnitude of 0.5 g.
- A finite element modelling shall be built to assess the global and local structural behaviour of the entire building complex as well as individual structural elements.
- The modelling shall also take into account the proposed changes on the LLW building of permanently increasing the height main entrance door and replacement of the overhead concrete beam with removable steel beam.
- A full analysis report containing all input data, assumptions, load cases, modelling philosophy, codes and standards, verification and validation, analysis, results and recommendations shall be submitted to the *Employer* following a 501 modification process.
- The modelling file shall also be submitted to the *Employer* for future use.

**Note:** The *Contractor* should note that a similar structural model was developed for the Cask Storage Project (CSB) however the contract has since lapsed and the scope of the modelling did not take into account the proposed changes on the LLW building.

#### **2.6. Supply**

In Providing the Works, the *Contractor* supply the follow:

- Modification of pre-cast shield panels, in accordance with section 2..2,
- a Quality Control Plan (QCP) document showing manufacturing sign off on acceptance on components,
- allows the *Employers Representative* to perform quality control inspection of off-site manufactured components,
- provides a Certification of Conformance (COC) to the *Employers Representative* for all manufactured elements delivered before installation commences,
- ensures that any crane truck and its rigging Equipment used for loading and offloading must have valid load test certification,
- ensures that all vehicles entering the premises complies with the *Employer's* Vehicle and Driver Safety Management Procedure (240-62946386),
- ensures that all materials and components are stored in such a manner as not damage them and to ensure that stored items are not a hazard to people and the environment,
- complies with the *Employer's* Life Saving Rules as stipulated in the *Employer's* Management Directive 32-421.
- allow the *Employer* to perform quality oversight as per the accepted QCP's.



## 2.7. Install

In Providing the Works the *Contractor*:

- Performs scanning of underground services (for underground cables and or services) before excavation work takes place at the Site. The results of the scan must be provided to the *Employer's Representative* for acceptance. The *Employers Representative* will provide further instructions to the *Contractor*, which may include re-routing of services, protection of services or nothing depending on the Site condition;
- Provides Site establishment as required;
- Provides Site establishment drawings clearly showing the position on Site, the *Contractor's* storage facilities and Site office facilities requirements;
- Provides full time competent and skilled labour force, competent supervision and Health and Safety Officer, in accordance with the Construction Regulations 2003 of the OSH Act, the Project and Construction Management Professions Act 48 of 2000 and CIDB Civil Engineering (CE) (At the appropriate level), as applicable;
- Provides a Quality Control Plan (QCP) for the installation phase for the *Employers Representative* acceptance;
- Maintains a clean and tidy construction site, ensuring that the Site is kept clean on a daily basis;
- Provides protection of existing structures and services;
- Ensures there is no disruption to the *Employer's* existing business;
- Provides fall arrest plans and Equipment when required or in accordance to the *Contractors* method statement and submits it for acceptance by the *Employers Representative*;
- Attends weekly Site progress meetings as stipulated in the Works Information;
- Measures the *works* and assess the amount due by each *assessment day*, and provide to the *Employer's Representative* payment certificates for acceptance.

## 2.8. Existing works on the Site

The *Contractor* does not re-route any existing services. All existing services will be re-routed by the *Employer* upon written request from the *Contractor*. The *Employer* may instruct the *Contractor* to perform rerouting of services, as an instruction under Core Clause 60.1 (1). The *Employer* does not have sufficient records of underground services; therefore the *Contractor* performs underground services scanning to determine the extent of such services, before excavation will be permitted by the *Employer*.

## 2.9. Completion

The *Employer's Representative* certifies Completion when the *works* have been completed and accepted. This includes the acceptance of the Site after the *Contractor* cleans the Site, takes the rubble away and does the final inspection with the *Employer's Representative*.

## 2.10. Drawings and specifications

The *Contractor* complies with all the drawings and specifications as stipulated in this contract, URS (NPM21/008) and in the table below:

Title	Tick (X) if publicly available
Environmental Authorisation 12/12/20/997	
Construction Checklist (KGA-073)	
FFD Enrolment Map	
Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site	X
Occupational Health and Safety Act, 1993 (Act No.85 of 1993)	X
Construction Safety, Health and Environment Procedure, number 32-136	

Title	Tick (X) if publicly available
Procedure 32-95 - Environmental, Occupational Health and Safety Incident Management Procedure	
Health and safety plan (CR 7 (1)a)	X
Health and safety plan according to EPC 32-136	X
Expected hazards and risks at the KOU have been referenced in EPC 32-136	X
Occupational Health Services Job Specification (reference KfV-SR-004)	X
Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended	X
The Nuclear Energy Act 92 of 1982	X
National Key Points Act 102 of 1980	X
The Protection of Information Act 84 of 1982	X
National Road Traffic Act, 1996 (Act No. 93 Of 1996)	X
The Basic Conditions of Employment Act 75 of 1997	X
Labour Relations Act 66 of 1995	X
Medicine and Related Substance Control Act 101 of 1965	X
National Health Act 61 of 2003	X
Compensation for Occupational Injuries and Diseases Act 130 of 1993	X
Site regulations and access control	
SANS 920	X
Construction Regulations – 2014	X
331-86: Design Changes to Plant, Plant Structures or Operating Parameters	
KAA-501: Project Management Process for the Koeberg Nuclear Power Station Modifications 331-134: Screening and Safety Evaluation Guide	
KAA-502: project management process for new building and civil projects and changes to existing building and civil projects at Koeberg nuclear power station	
SANS 1200 (SABS 1200)) Series Standardized specification for civil engineering construction: Concrete (structural)	
SANS 10400: The application of the National building Regulations – All Parts	
Construction Regulations Act 18 of 2003	
ISO 9001 Quality Management Systems – Requirements	X
All other relevant SANS regulations	X
DSG-318-087 Rev 1 Quality Requirements for Procurement of Assets Goods and Services	

Title	Tick (X) if publicly available
SANS 2001: CC1 Construction Works Part CC1- Concrete Works (Structural)	X
SANS 2001: Construction Works	X
SANS 5861 – 2: Concrete Testing	X
SANS 5861 – 3 :Concrete Testing	X
SANS 5862 – 1 :Concrete Testing	X
SANS 5863 Concrete Testing :Compressive Strength of hardened concrete	X
SANS 2001 :CS1 Structural Steelwork	X
SANS 1393 Construction Management Systems - Requirements	X
331-170: Corrosion Protection Maintenance Manual	X
335-5 Rev 4-SAFETY, HEALTH & ENVIRONMENTAL (SHE) INDUCTION	
KGA-073 Rev 6-SHE specification Guideline	
Contractor Health and Safety Requirements 32-136	
KAA-634 Rev4: RESPONSIBILITIES FOR THE RADIOACTIVE MATERIALCONTROL PROGRAMME	

### 3. Constraints on how the *Contractor* Provides the Works

#### 3.1. Meetings

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

##### 3.1.1. Project kick-off meeting

Interval	Location	Attendance by:
Once	KOU	<i>Employer's Representative</i> , and Others as appointed by the <i>Employer</i>

	Activity Description	Employer/ Employers Representa five	Contractor	Requirements	Planning	Additional notes
	<ul style="list-style-type: none"> <li>Establishing the project team</li> </ul>	X		The <i>Employer's Representative</i> notifies the names of <i>Employer</i> key persons to support the <i>Contractor</i> with the Provision of the Works, in terms of the <i>Employer</i> functions.	Within 1 week after the Contract Date.	At kick-off meeting with <i>Employer's Org</i> structure.
	<ul style="list-style-type: none"> <li>Notification, venue, agenda and support documentation</li> </ul>	X		The <i>Employer's Representative</i> develops and notifies the agenda, venue and required support documentation for the meeting.	Within 2 weeks after the Contract Date.	An <i>Employer</i> systems engineer, operations representative and maintenance representative is present at the meeting.
	<ul style="list-style-type: none"> <li>Execution and Minutes</li> </ul>	X		The <i>Employer's Representative</i> assumes chairmanship of the meeting, records and distributes the minutes of meeting.	Within 2 days of the meeting	
	<ul style="list-style-type: none"> <li>Conclusion</li> </ul>	X	X	This activity is complete upon acceptance of the minutes of the kick-off meeting by both Parties.	In accordance with the Accepted Programme	Deliverable: Minutes of the kick-off meeting.

### 3.1.2. Risk reduction meetings

Interval	Location	Attendance by:
As notified	KOU	<i>Contractor, Employer's Representative, and Others</i> as appointed by the <i>Employer</i>
At the risk reduction meetings items as prescribed in ECSC3 Core Clauses 16.1 and 16.2 are discussed. The Risk Register is updated, by the <i>Employer's Representative</i> , and distributed within five days of the meeting.		

### 3.1.3. Operational meetings

Interval	Location	Attendance by:
Weekly during contract period	KOU or Tele/Video Conference	<i>Employer's Representative and Contractor</i>

An operational meeting is held, by tele or video conference if necessary, between the *Employer's Representative* and the *Contractor* to monitor and control the design, manufacturing and planning processes. Typical topics for discussion at this meeting will include *Contractor's* reporting on the following:

- Review of Project Progress (Programme) 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.

#### 3.1.4. Implementation meeting for specific progress and feedback

Interval	Location	Attendance by:
Daily during implementation	KOU	<i>Contractor</i> and <i>Employer's Representative</i>

The implementation meeting is held between the *Contractor* and *Employer's Representative* implementation support team, to report on implementation progress and review any risks, issues and *Employer* actions that need to be resolved in order to ensure smooth implementation of the *works*.

#### 3.1.5. QC Meetings during implementation

Interval	Location	Attendance by:
Daily during implementation	KOU	<i>Contractor</i> QC representative and <i>Employer</i> QC representatives

The *Contractor's* QC representatives provide reports from each meeting to the *Employer's* project QC Group. This report will cover:

- Scheduled QC inspections for the period identified in the meeting.
- Any new QC related issues identified since the last report, its status and action plan for resolution.
- Status and progress on previously reported quality issues.

#### 3.1.6. Meetings of a specialist nature

Interval	Location	Attendance by:
Adhoc	Any	<i>Employer's</i> personnel, the <i>Employer's Representative</i> , the <i>Contractor</i> and Others as required

Meetings of a specialist nature may be convened by persons and at times and locations to suit the Parties, the nature and the progress of the *works*.

#### 3.1.7. Post implementation meeting for project feedback and review

Interval	Location	Attendance by:
After completion of the <i>works</i>	KOU	<i>Employer's Representative</i> , <i>Contractor</i> Senior Manager (not the <i>Contractor's</i> <i>Employer's Representative</i> ), <i>Contractor's</i> <i>Employer's Representative</i> , <i>Employer's</i> personnel and Others as required

The post implementation meeting is held between the *Employer's Representative*, *Contractor* senior management, *Contractor*, other line groups, to report on implementation issues and reviews. Share lessons learnt in order to ensure smooth implementation on the next implementation phase.

All meetings are recorded using minutes or a register prepared and circulated by the person who convened the meeting. Records of these meetings shall be submitted to the *Employer's Representative* by the person convening the meeting within five days of 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. Confirmation of contract communications during operational meetings will, however, be considered as formal acknowledgement of receipt of a contract communication.

### 3.2. Use of standard forms

The *Employer's Representative* and the *Contractor* will use the standard NEC templates listed below:

- 14.4 Delegation by *Employer*
- 15.1 and 22.1 Access
- 16.1 Early Warning by *Contractor*
- 16.1 Early Warning by *Employer's Representative*
- 30.3 Completion Certificate
- 40.2 Notification of Defect by *Employer's Representative*
- 41.4 Defect Certificate
- 50.1 *Contractor's* assessment of amount due
- 61.1 Compensation Event notification by *Contractor*
- 62.2 Compensation Event Request for Quotation by *Employer*
- 90.1 Termination Certificate
- Acceptance submission by *Contractor*
- *Employer's Representative* Instruction
- *Employer's Representative* summary of amount due

### 3.3. Invoicing and payment

In terms of core clause 50 the *Contractor* assesses the amount due and applies to the *Employer* for payment. The *Contractor* applies for payment with a tax invoice addressed to the *Employer* that complies with the requirements below.

The *Contractor* includes the following information on each tax invoice:

- The *Contractor* ensures that the requirement in terms of Section 20(4) (C) 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) (C), is adhered to. Adherence by the *Contractor* to this requirement is applicable since 1 June 2004. No payment is to be made on tax invoices not fully meeting this requirement.
- The *Contractor* submits an original Tax Invoice to the *Employer's* Financial Accounting group or via e-mail to [Invoiceseskomlocal@eskom.co.za](mailto:Invoiceseskomlocal@eskom.co.za). A copy of each invoice is forwarded to the *Employer's Representative* to allow follow-up in the event of payment delays. The payment period will start from the date and time at which the invoice and all relevant documentation were received at this office.
- The *Employer's* VAT Registration Number is 4740101508.
- All invoices are marked for the attention of:

The Accounts Payable Section  
Koeberg Nuclear Power Station  
Private Bag X10  
Kernkrag  
7440

## South Africa

- Particulars to be included on the *Contractor's* Tax Invoice:
  - The words "Tax Invoice" in a prominent place;
  - The name, address and VAT registration number of the *Contractor*;
  - The name, address and VAT registration number of the *Employer*;
  - An invoice serial number;
  - The date of issue of the invoice;
  - The quantity or volume of goods or services supplied;
  - The price & VAT or a statement that VAT is included @ 15% or zero- rate;
  - Reference to the Contract;
  - A descriptive title of the *service* covered by the Invoice and/or the Contract assessment number;
  - and
  - A signed copy of the Assessment Certificate and SAP release order (SAP 45 line and item number).
- Abridged tax invoice (section 20(5)). Where the amount (incl. VAT) is less than R3 000.00. The same requirements as above, except that the Name, address and VAT registration number of the *Employer*; and the quantity or volume does not need to be specified.

Payment is made by means of electronic transfer. The *Contractor* therefore provides his banking details to the *Employer's Representative* within one week of the Contract Date. The *Contractor* attaches the detail assessment of the amount due to each tax invoice showing the Price for Work Done to Date for each item in the Price List for work which he has completed.

### 3.4. Records of Defined Cost

In order to substantiate the Defined Cost of compensation events, the *Employer* requires the *Contractor* to keep records of amounts paid by him for people employed by the *Contractor*, Plant and Materials, work sub-contracted by the *Contractor* and Equipment. [See clause 11.2(5) and 63.2]. The records must be kept in both electronic and hard copy, and must be issued to the *Employer's Representative* at the earliest possible time.

### 3.5. Compensation events

#### 3.5.1. Concurrent delay

If the *Contractor* incurs additional costs that are caused both by *Employer* delay and concurrent *Contractor* delay, then the *Contractor* may only recover compensation to the extent the *Contractor* is able to separately identify the additional costs caused by the *Employer* delay from those caused by the *Contractor* delay. If the *Contractor* would have incurred the additional costs in any event as a result of *Contractor* delays, the *Contractor* is not entitled to recover those additional costs

#### 3.5.2. COVID-19 Pandemic

The spread of the COVID-19 Pandemic constitute a Force Majeure event. The principal cause of the introduction of preventative measures by the government is the spread of the COVID-19 Pandemic. Hence the primary basis of any claim from the *Contractor* should be the spread of the COVID-19 Pandemic, i.e. a Force Majeure event, as opposed to the introduction or amendments to the existing legislation and or regulation.

The corona virus outbreak could also result in a number of the compensation events being triggered under clause 60.1, such as the following examples:

- 60.1(2) – the *Employer* does not allow access to part of the Site by the date shown on the Accepted Programme.
- 60.1(3) – the *Employer* does not supply something by the date for providing it shown on the Accepted Programme.
- etc.

### 3.5.3. Mitigation of delay

The *Contractor* has a duty to mitigate the effect, of *Employer* risk events, on the *works* and the *Contractor* does all it reasonably can to avoid an impact on the Prices. The duty to mitigate does not extend to the *Contractor* to adding extra resources or to work outside its planned working hours.

### 3.6. Supplier Development and Localisation Initiatives

The *Employer* endeavours to support Subject Matter Expert (SME) and Quality Safety Evaluation (QSE) designated group suppliers in the Western Cape Province. The objective is to focus on the broader West Coast Corridor spanning a 100km radius from Koeberg Nuclear Power Plant (KNPP). The *Contractor* ensures that the services will be completely provided from the local market. The *Contractor* finds opportunities to either subcontract and/or use local to Site labour for portions of the *works*.

The *Contractor* through the Provision of the Works, enhances capacity and capability by ensuring that technical support is directed towards skills development. By doing this the capacity and competitiveness of the local supply base will be increased and the goals of shared growth, employment creation, poverty reduction and skills development will be achieved.

### 3.7. Procurement

#### 3.7.1. B-BBEE and preferencing scheme

The *Employer* as an organ of state is governed by the Preferential Procurement Regulations 2011 which stated that all contracts for Goods or Services are procured in accordance with a system that is fair, equitable, transparent, competitive and cost-effective.

The following preference point systems will be applicable to all tenders.

The use of the 80/20 system (80 (price): 20 (BBBEE) preference point system for procurement greater than R1 M.

A two stage of tender evaluation will apply

- First stage

The use of a functionality (technical evaluation) as a gatekeeper. Only *Contractors* who meet the functionality threshold will be further evaluated.

*Contractors* who meets the functionality threshold, but are not on the approved supplier listing (ASL) for nuclear will be further subject to a supplier capability assessment; which will form part of the first stage of the evaluation.

An analysis of the *Contractor's* financial statements will be conducted for the purposes of establishing the tenderer's financial viability and ability to meet its entire contractual obligation for the duration for the contract, should the tenderer be awarded the contract.

Where applicable a financial evaluation will be conducted by the *Employer* to further evaluate the financial viability of the tenderer.

Financial analysis will be conducted on all responsive and compliant tenders prior to the price and preference scoring. Tenders which do not meet the *Employers* financial requirements will not be evaluated further.

- Second stage

*Contractors* will be further evaluated in terms of their price and B-BBEE status level of contribution using the 80/20 preference point system:

80%	Price; and
20%	B-BBEE Status Level of Contribution

An approach involving cross functional teams will be taken during the evaluation of tenders to ensure that the best interests of the *Employer* are assured.



The scope of the *works* is not covered under a designated sector in terms of Regulation 9 of the Preferential Procurement Regulations.

### **3.8. Facilities to be provided by the Contractor**

The *Contractor* shall provide sufficient latrine facilities for the use of his employees and shall be entirely responsible for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the *Employer*.

Latrines shall be provided at the rate of one for 12 persons, and the *Contractor* shall make his own arrangements and pay all charges for the removal of sewage to the satisfaction of the health authority concerned.

The *Contractor* ensures that passengers are not transported on the back of LDV's (bakkies) or trucks within the boundaries of the *Employer's* property.

The *Contractor* provides everything necessary for Providing the Works.

### **3.9. Records of Contractor's Equipment**

All Equipment and Plant and Materials are subject to a security screening allowed on the Site. All Equipment and Plant and Materials are listed and specified before brought on Site. This list serves as evidence for removal permits upon Completion of the *works*. Vehicles are only allowed on Site if justification is provided to the *Employer* that such a vehicle is essential to Provide the Works.

### **3.10. Equipment provided by the Employer**

No Equipment will be provided by the *Employer*. The *Contractor* is required to supply all the necessary consumables, tools and Equipment to execute the job. The *Contractor's* Method Statement as mentioned in 1.6 above, should reflect the Equipment and Plant and Material breakdown.

### **3.11. Title to material from excavation and demolition**

The *Contractor* has title to materials from excavation and demolition, however, the *Employer's Representative* must accept which materials are to be removed from Site.

### **3.12. Design by the Contractor**

The *Contractor* shall provide the *works* in accordance to the *Employer's* design 240-163735968.

### **3.13. Documentation control**

#### **3.13.1. Record Management**

- Each document deliverable is provided in hardcopy and includes all signatures obtained internally and from the *Employer*.
- Each document deliverable is provided as a searchable electronic PDF format and includes all signatures obtained internally, from the *Contractor*, and from the *Employer*. Electronic signatures are generally acceptable in accordance with the *Contractor's* Quality Management System.
- Each document deliverable is provided as an editable Microsoft file which corresponds to all final documentation issued to the *Employer*.
- Where agreed between the Parties, the *Contractor* may supply a "Word" document, to facilitate the *Employer's* review by means of "track changes".
- All final drawings are handed to the *Employer* in the electronic media and are compiled on a Micro station Version 7 (or higher) compatible software program.
- All new drawings are sized to metric paper size standards (A4, A3 etc.).
- Programmes, prepared by the *Contractor*, for the *works* and accepted by the *Employer's Representative* are considered as records.

#### **3.13.2. Documentation quality and control**

- All documentation, including drawings and operating and maintenance instruction manuals, are uniquely identified and cross-referenced with all related documents.

### 3.13.3. Documentation to be provided by the *Employer*

- The *Employer's Representative*, on request from the *Contractor*, provides copies of all applicable *Employer* standards, procedures, guides, work instructions and forms.
- Copy requests are made in writing, to the *Employer's Representative*, and details the exact documentation identification numbers.
- Documentation is provided in accordance with the latest accepted programme.

### 3.13.4. Communication

Format: All communication is addressed to the *Employer's Representative*. All communication makes reference to:

- The contract number that is issued by the *Employer* i.e. 46000.....;
- the title of the contract;
- the specific ECSC clause under which the communication is issued;
- each notification deals with only one specific issue at a time;
- All formal communications shall be e-mailed to the *Employer's Representative* and the documentation controller, as an attachment. When these letters are submitted by means of e-mail, the title of the letter is reflected in the subject line and only one letter is submitted per email; and
- All formal communications received via e-mail shall be confirmed via a return e-mail.

## 3.14. Health and safety risk management

The *Contractor* complies with the *Employers* SHE specifications reference 32-136(0) and requests it from the *Employer's Representative* on Site establishment.

- A Safety, Health, and Environment (SHE) plan shall be submitted to the *Employer's Representative* for the *works* performed on the Site by tender closing.
- A project specific SHE file is to be created by the *Contractor* and submitted together with a completed copy of the Construction Regulations Checklist to the *Employer's Representative* for acceptance within 2 (two) months of the *starting date* following which the *Contractor* maintains and updates the file.
- Provide a copy of current health and safety policy by tender closing.
- All work carried out by the *Contractor*, is done in strict accordance with all relevant safety Laws and procedures.
- The *Contractor* provides the *Employer's Representative* with the following before work at the Site commences:
  - Health and Safety plan
  - Letters of appointment
  - Risk assessments of the tasks

It is to be noted that before any work can commence on Site, the *Contractor* must have performed a detailed risk assessment of the *works* and/or the work area where work is to be performed. The risk assessment is documented and handed the *Employer's Representative* for acceptance. The *Contractor* discusses the risk assessment with all employees involved with the *works*. The *Contractor* ensures that:

- At least one team member is a qualified first aider with a valid level 2 first aid certificate.
- All operators of Equipment have valid training certificates from an accredited training company to operate such equipment.
- All employees working on the Site wears the mandatory Personal Protective Equipment (PPE), such as hard hat (with chin strap), safety boots, ear plugs, COVID-19 related PPE and safety glasses.
- Safety induction and environmental training pertaining to the Site will be conducted by the *Employer's Representative*.

## 3.15. Nuclear and Conventional Safety

The *Contractor* promotes a culture that is dedicated to continuously striving to enhance nuclear and conventional safety. The *Employer* defines appropriate safety objectives for the Site, and the *Contractor* is also responsible for meeting those objectives, instilling a philosophy of personal excellence, and timely identification and resolution of safety problems. The *Contractor* is responsible for continuously pursuing enhancements to safety-not just complying with a minimal set of legal requirements.

### **3.16. Environmental constraints and management**

The *Contractor* ensures that all Plant and Materials and *works* supplied in terms of this contract conform to all applicable environmental legislation and to the *Employer's* environmental specifications. *Contractors'* personnel, Equipment, Plant and Materials does not enter the Site beyond the road reserve boundary irrespective of whether or not the boundary is fenced. The *Contractor* takes every precaution to avoid damage to vegetation within the area that falls outside the designated work areas. Any damage caused will be repaired at the *Contractor's* expense. Storage and stockpiling of materials will not be permitted without the written consent of the *Employer's Representative*.

The *Contractor* ensures that all concepts and provisions stated in the National Heritage resources Act, no 25 of 1999 is adhered to and that no disturbance of whatever nature takes place on the Site without the consent of Generation Environmental Management (GEM) & South African Heritage Resource Association (SAHRA).

### **3.17. General constraints**

#### **3.17.1. Laws and regulations to be complied with**

The *Contractor* at his own expense complies with the Nuclear Energy Act 92 of 1982, the Protection of Information Act 84 of 1982 and in general with all laws, regulations, by-laws and requirements of local and other authorities which may be applicable to the *works* and as amended or replaced.

At the Site the *Contractor* is at all relevant times under the authority of the *Employer's* Land Portfolio Manager for the purpose of giving effect to the provisions of the above clause hereof. Notwithstanding the afore said, this does not in any way relieve the *Contractor* of his obligation to comply with the relevant legislation, should the *Employer's* Land Portfolio Manager fail to act in any specific manner which makes him or the *Employer* liable in any way whatsoever.

The *Contractor* at its own expense complies with the Basic Conditions of Employment Act No. 75 of 1997. The *Contractor* indemnifies the *Employer* against any claims, proceedings, compensation and cost arising from the *Contractor* transgression of the Act.

The *Contractor* complies with all relevant labour legislation and applies to the Ministerial Determination for working hours, and obtains approval prior to the commencement of any work on Site. The *Contractor* submits the approval to the *Employer's Representative* for acceptance.

#### **3.17.2. Confidentiality and publicity**

The exchange between the Parties or the disclosure to third parties of information is subject to the provisions of the Nuclear Energy Act 92 of 1982, the National Key Points Act 102 of 1980, and the Protection of Information Act 84 of 1982. The *Contractor* agrees that neither the *Contractor* nor its employees, agents or sub-contractors make any public statements or release to any third party (including the *Adjudicator*) any information concerning the performance of any work without first obtaining the written approval of the *Employer's Representative*. Requests to release information are co-ordinated by the *Employer's Representative* through the designated *Employer's* Commercial Manager or the *Employer's* Power Station Manager. The *Contractor* ensures adherence of its employees, agents and sub-contractors to this restriction.

#### **3.17.3. Reporting culture**

The *Contractor* 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 *Contractor'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).

#### **3.17.4. Observation programme**

It is desired (not expected) that the *Contractor* is capable of performing initial investigations into human performance events to determine the contributing factors (error precursors and organisational weaknesses). The *Contractor* must however support and co-operate with any such investigation by KOU.

The *Contractor* is required to have a process whereby workers' at-work behaviours in the field are observed and coached against a set of formalised best practice criteria. This is to reinforce the desired standards and behaviours expected on the job site and to provide assurance that the *Contractor's* workers and supervisors are adhering to standards. The *Contractor's* workers must be coached where deviations from standards and expected behaviours are detected.

This information is captured, by the *Contractor*, in a means that allows review of previous observations performed for the identification of potential trends in worker behaviours that could potentially lead to an event. Actions are to be developed and implemented to address such trends. The *Contractor's* process must have an auditable trail.

#### **3.17.5. Employer's Koeberg Nuclear Power Station entry and security control, permits, and plant regulations**

Any person visiting the Koeberg Nuclear Power Station (KNPS), or as generally known, the Owner Controlled Area (OCA), will be required to do training on the KNPS access requirements and safety induction for the plant. The training is two hours, conducted by the Environmental Officer of the KNPS.

In accordance with the *Employers* vehicle policy, no person will be allowed to be transported unless he/she has been properly seated and belted in with an SABS approved vehicle safety belt.

All waste material, stemming from the *works* will be discarded of in line with legislation and by-laws.

#### **3.17.6. Fitness for duty management**

The *Contractor* adheres to the *Employer's* procedure re. Fitness for duty requirements for vendors and contractors who are required to perform work inside the owner controlled areas of KNPS (335-68). This document is not applicable to visitors. Accesses for visitors are dealt with in KAA-777.

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

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

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

##### **3.17.6.1. FFD requirements before registration takes place**

Information the *Contractor's* employee must supply

- Identification document;
- Work permit (non SA citizens);
- Qualifications;

- Curriculum Vitae (CV);
- Criminal record history; and
- Proof of residential address.

Forms that the *Contractor's* employee must sign

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

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

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional notes
•	Recruitment & Selection		X	•	<i>Contractor's</i> own planning	
•	ID Document		X	Proof of identification is required before that the <i>Contractor's</i> employee is allowed to register on the FFD system.	<i>Contractor'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"> <li>• South African Identification Book issued by the Department of Home Affairs. (Green ID) or</li> <li>• Valid Official Passport or</li> <li>• Valid Temporary Identification Document issued by the Department of Home Affairs.</li> </ul>
•	Proof of Residential Address		X	Proof of residential address is required before that the <i>Contractor's</i> employee is allowed to register on the FFD system.	<i>Contractor's</i> own planning	The proof may not be older than 3 months when the <i>Contractor's</i> employee is enrolled on the FFD system.
•	CV and Qualifications		X	Authenticated qualifications to be presented before registration takes place	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> <li>• CVs of <i>Contractor</i> employees are included in the documents where this is required by the procedure.</li> <li>• The <i>Contractor's</i> employees must be in possession of his/her CV when he/she arrives on site to start the FFD process.</li> <li>• The <i>Contractor</i> is required to verify the authenticity of the qualifications that is</li> </ul>

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional notes
						<p>required for the work that is to be performed on Site. The <i>Employer</i> retains the right to verify any tertiary qualification that an applicant is required to have to work in a specific discipline.</p> <ul style="list-style-type: none"> <li>• The <i>Contractor</i> ensures that his employee has the original (or certified copy) of the qualifications when he/she is registered on the FFD system.</li> <li>• Persons not in possession of the qualifications required by the <i>Employer</i> are not considered for employment by the <i>Contractor</i> (in that particular discipline).</li> </ul>
	<ul style="list-style-type: none"> <li>• Criminal History</li> </ul>		X	Assessment of criminal history	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> <li>• Terminate Process Hold Point</li> <li>• The criminal history of an applicant shall be assessed before access to the Site is considered.</li> <li>• 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>Contractor'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.</li> <li>• 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</li> </ul>

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional notes
						<p>months of their required access date.</p> <ul style="list-style-type: none"> <li>• 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>Contractor</i>.</li> <li>• The <i>Contractor's</i> employee will be in possession of the proof of criminal history when he/she arrives on site to start the FFD process.</li> </ul>
	<ul style="list-style-type: none"> <li>• Complete Man Job Spec Form</li> </ul>	X	X	<p><i>Contractor</i> to complete with <i>Employer's Representative</i></p>	<p><i>Contractor's</i> own planning</p>	<ul style="list-style-type: none"> <li>• The <i>Contractor</i> ensures that an occupational health services job specification form is completed, in conjunction with the <i>Employer's Representative</i>; for each of his employees and all signatures are obtained before the health assessment is arranged.</li> <li>• These forms are obtainable from the <i>Employer</i> at Koeberg. The form identifies the work scope, the occupational hazards that the <i>Contractor's</i> employee will be exposed to and the physical attributes that are required for the execution of the tasks.</li> <li>• The <i>Contractor'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.</li> </ul>
	<ul style="list-style-type: none"> <li>• Drug Test</li> </ul>		X	<p>Negative drug test to be presented before registration takes place</p>	<p><i>Contractor's</i> own planning</p>	<ul style="list-style-type: none"> <li>• Terminate Process Hold Point</li> <li>• <i>Contractor</i> ensures that their employees have been tested for drugs before they arrive on site to start the FFD process. Persons with a positive</li> </ul>

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional notes
						<p>drug test result are not considered for employment by the Contractor.</p> <ul style="list-style-type: none"> <li>• Persons with positive drug tests will not be allowed to register for the FFD process.</li> <li>• The Contractor's employees must be in possession of the drug test results when he/she arrives on site to start the FFD process.</li> </ul>
	<ul style="list-style-type: none"> <li>• Health Assessment</li> </ul>		X	<p>Medical examination to be presented before registration takes place</p>	<p>Contractor's own planning</p>	<ul style="list-style-type: none"> <li>• Terminate Process Hold Point</li> <li>• The Contractor 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.</li> <li>• 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.</li> <li>• Health assessment are only performed by Employer registered Occupational Health Practitioners.</li> <li>• The health assessment report is not older than 3 months when the Contractor's employee is enrolled on the FFD system.</li> <li>• Persons that are not declared fit to perform the work specified in the occupational health services job specification form are not be considered for</li> </ul>



	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional notes
						<p>employment by the <i>Contractor</i>.</p> <ul style="list-style-type: none"> <li>The <i>Contractor'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.</li> </ul>
	<ul style="list-style-type: none"> <li>Work Permit</li> </ul>		X	<p>Work permits to be obtained before registration takes place</p>	<p><i>Contractor's</i> own planning</p>	<ul style="list-style-type: none"> <li>Terminate Process Hold Point</li> <li>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.</li> <li>Persons not in possession of a valid work permit is not be considered for employment by the <i>Contractor</i>.</li> <li>The <i>Contractor's</i> employee must be in possession of the original work permit when he/she arrives on site to start the FFD process.</li> </ul>
	<ul style="list-style-type: none"> <li>Registration on FFD System</li> </ul>	X	X		<p><i>Contractor's</i> own planning</p>	<ul style="list-style-type: none"> <li><i>Contractor'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>Contractor</i> employee, if appointed by the <i>Employer</i>. The <i>Employer's Representative</i> is responsible to arrange this activity. Registration is only performed if the <i>Contractor's</i> employee is in possession of all the documentation required for registration</li> <li>If the <i>Contractor's</i> employee is in possession of all the required documents, the individual will be registered and issued with a bar coded form.</li> </ul>

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional notes
	<ul style="list-style-type: none"> <li>Training Requirements Form</li> </ul>	X	X	Employer's Representative and Contractor to supply	Contractor's own planning	<ul style="list-style-type: none"> <li>The scope of each Contractor employee's work requirements are to be assessed to identify the training and/or technical assessments that are required before work may commence.</li> <li>All Employer training sessions includes an assessment at the 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.</li> <li>The Employer's Representative 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.</li> <li>The Contractor's employee must be in possession of the training requirements form when he/she arrives on site to start the FFD process.</li> </ul>
	<ul style="list-style-type: none"> <li>FFD Bookings</li> </ul>	X	X		Contractor's own planning	<ul style="list-style-type: none"> <li>Contractor's employees are booked on the Employer's FFD system by a person appointed by the Employer. This could be a Contractor employee, if appointed by the Employer.</li> </ul>
	<ul style="list-style-type: none"> <li>Confined Space Training</li> </ul>		X	Training that the Contractor's employee must complete (only if required)	Contractor's own planning	Only if required

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional notes
	• Basic Rigging Training		X	Training that the <i>Contractor's</i> employee must complete (only if required)	<i>Contractor's</i> own planning	Only if required. The <i>Contractor</i> verifies the validity of prior learning
	• Non-Disclosure Agreement		X	All <i>Contractor</i> employees are required to sign a non-disclosure agreement	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> <li>The <i>Contractor</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.</li> </ul>
	• Security Permit Application	X	X	<i>Employer's Representative</i> and <i>Contractor</i> to supply	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> <li>The <i>Contractor</i> 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.</li> <li>It is important that the form is completed by the <i>Contractor</i> in conjunction with the <i>Employer's Representative</i>. The form identifies the security areas that the <i>Contractor's</i> employee is required to enter for the execution of the tasks.</li> <li>The <i>Contractor's</i> employees must be in possession of the security permit application when he/she arrives on site to start the FFD process.</li> </ul>

**3.17.6.2. Fraudulent Documents**

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

**3.17.6.3. False Declarations**

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

**3.17.6.4. FFD requirements after registration takes place**

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

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional Notes
<ul style="list-style-type: none"> <li>Enrolment on FFD System</li> </ul>	X	X	X	<p><i>Contractor's</i> employees shall be enrolled on the <i>Employer's</i> FFD system by the Security Group when they arrive on site.</p>	10 min	<ul style="list-style-type: none"> <li>A <i>Contractor'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.</li> </ul>
<ul style="list-style-type: none"> <li>Drug Test</li> </ul>	X	X	X	<p>All the <i>Contractor'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>Contractor</i>.</p>	30 min	<ul style="list-style-type: none"> <li>The <i>Contractor'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.</li> </ul>
<ul style="list-style-type: none"> <li>Criminal History Verification</li> </ul>	X	X	X	<p>All <i>Contractor</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.</p>	30 min	<ul style="list-style-type: none"> <li>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.</li> <li><i>Contractor</i> employees with a criminal background that is deemed to be a security risk to Koeberg are denied access to the Site</li> </ul>
<ul style="list-style-type: none"> <li>Health Verification</li> </ul>	X	X	X	<p><i>Contractor</i> employees are required to report to the</p>	30 min	<p>The duration of this activity is approximately 30 minutes</p>

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional Notes
				<p><i>Employer's Health Services section where the medical examination performed off-site will be verified to ensure that all requirements have been met.</i></p>		
	<p>Induction Training including:</p> <ul style="list-style-type: none"> <li>• SAT</li> <li>• PIT</li> <li>• FME (Generic)</li> <li>• Human Performance</li> </ul>	X	X	<ul style="list-style-type: none"> <li>• <b>Site Access Training (SAT)</b> <i>Contractor</i> employees that are required to work outside the protected area of KNPS are required to complete the SAT course before work may commence.</li> <li>• <b>Plant Induction Training (PIT)</b> <i>Contractor</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.</li> <li>• <b>Foreign Material Exclusion</b></li> </ul>	8 hours	<ul style="list-style-type: none"> <li>• <b>Site Access Training (SAT)</b> 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>Contractor</i> employees that do not successfully complete the SAT course shall not be allowed access to the Site.</li> <li>• <b>Plant Induction Training (PIT)</b> <i>Contractor</i> employees that do not successfully complete the PIT course are not allowed access to the Site. <i>Contractor</i> employees required to perform work in the intake basin are required to pass the PIT</li> <li>• <b>Foreign Material Exclusion Training (FME)</b> <i>Contractor</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</li> </ul>

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional Notes
				<p><b>Training (FME)</b> Contractor 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.</p> <p>• <b>Human Performance Training (HPT)</b> Contractor employees that are required to work inside the protected area of KNPS shall complete the Human Performance Training (HPT) before work may commence.</p>		<p>• <b>Human Performance Training (HPT)</b> Contractor employees that do not successfully complete the HPT course are not allowed access to Site. Contractor employees required to perform work in the intake basin are required to pass the HPT course.</p>
	<ul style="list-style-type: none"> <li>Induction to Working at Heights / Material Handling</li> </ul>	X	X	<ul style="list-style-type: none"> <li>Contractor employees are required to successfully complete the required Working at Heights/ Material Handling training before working at heights or handling material is considered.</li> </ul>	8 hours	<ul style="list-style-type: none"> <li>Only if required</li> <li>Failure to successfully complete the Working at Heights / Material Handling training will result in restriction to work at heights or handling material being prohibited</li> </ul>

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional Notes
	<ul style="list-style-type: none"> <li>Induction to Confined Space</li> </ul>	X	X	<ul style="list-style-type: none"> <li>Contractor employees are required to successfully complete the required confined space training before access to confined space is considered.</li> </ul>	2 hours	<ul style="list-style-type: none"> <li>Only if required</li> <li>Failure to successfully complete the confined space training will result in access to confined space being restricted</li> </ul>
	<ul style="list-style-type: none"> <li>Induction to Basic Rigging</li> </ul>	X	X	<ul style="list-style-type: none"> <li>Contractor employees are required to successfully complete the required Rigging training before rigging work is considered.</li> </ul>	8 hours	<ul style="list-style-type: none"> <li>Only if required</li> <li>Failure to successfully complete the Rigging training will result in rigging work being prohibited</li> </ul>
	<ul style="list-style-type: none"> <li>Supervisor Training</li> </ul>	X	X	<ul style="list-style-type: none"> <li>Contractor employees are required to work as supervisors must successfully complete the required supervisor training before work is considered.</li> </ul>	2.5 days	<ul style="list-style-type: none"> <li>Only if required</li> <li>Failure to successfully complete the supervisor training will result individual being prohibited to do supervision</li> </ul>
	Technical assessment <ul style="list-style-type: none"> <li>Mechanical</li> <li>Machining</li> <li>MC&amp;I</li> <li>Electrical</li> <li>Welding</li> <li>Pipe Fitting</li> <li>Civil TA 4</li> <li>I&amp;T</li> <li>MSS</li> </ul>	X	X	<ul style="list-style-type: none"> <li>Contractor employees who are required to perform work of a technical nature inside the protected area of Koeberg are required to perform</li> </ul>	4hrs - 16p 12hrs - 3p 16hrs - 16p 8hrs - 4p 4hrs - 6p 6hrs - 4p 6hrs - 4p 8hrs - 4p	<ul style="list-style-type: none"> <li>Only if required</li> <li>The Employer's Representative is responsible to indicate the work that the Contractor's employee will be performing on the Site.</li> <li>Contractor employees that do not successfully complete the technical assessment shall not be</li> </ul>

	Activity Description	Employer's Representative	Contractor	Requirements	Planning	Additional Notes
				technical assessments and be authorised to perform the work that they have been assessed for.		allowed to perform work on the Site. <ul style="list-style-type: none"> <li>The duration of this activity depends on the type of work discipline and scope and is between 4 hours and two days.</li> </ul>
	<ul style="list-style-type: none"> <li>Final acceptance and Issuing permit</li> </ul>	X	X	<ul style="list-style-type: none"> <li>All required FFD requirements are completed successfully before final acceptance is processed and a security permit is issued by the Security Group.</li> </ul>	30min	

### 3.17.6.5. 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	<a href="mailto:Magda.VanZyl@lifehealthcare.co.za">Magda.VanZyl@lifehealthcare.co.za</a>
Incon	Benita Du Preez	021 975 2694 ext. 2001	<a href="mailto:benita@incon.co.za">benita@incon.co.za</a>
OCSA	Sibusiso Ngubane	0219810141	<a href="mailto:sibusison@ocsa.co.za">sibusison@ocsa.co.za</a>
EOH	Pam Kinnock	0212527750	<a href="mailto:Pam.Pinnock@eoh.co.za">Pam.Pinnock@eoh.co.za</a>
Fair Care Health	Colleen Paul	021 552 1377 I	<a href="mailto:hmalaka@msn.com">hmalaka@msn.com</a>

The *Contractor* is responsible for the cost and completion of the medical examination by his personnel prior to them coming to Site.

The *Contractor* is liable for payment of medical examinations and COVID -19 screening of staff.

### 3.17.6.6. Criminal record check verification service provider:

For all background screenings and qualification verifications.

4 Denne Ave, Panorama, Cape Town, 7506  
 Office Number 021 911 5011 / 021 911 5338  
 Fax: 086 750 2734  
 Cell: 084 8500 432, e-mail: [call@nevetec.co.za](mailto:call@nevetec.co.za)  
[www.nevetec.co.za](http://www.nevetec.co.za)



### **3.17.6.7. COVID-19 controls that must be followed:**

- Mask shall be provided by the *Contractor* and employees will wear it at all times while at the Site
- Temperature screening must be done outside of FFD centre in the allocated location, before proceeding to the Medical Centre reception desk.
- Hand sanitizers are in place and the practicing of social distancing will be strictly adhered to.

### **3.17.6.8. Exit procedure**

The *Contractor* is responsible to 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 *Contractor's* employee being denied access in future.

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

### **3.17.6.9. Security check points**

Prior to access to Site, the *Contractor* passes through various security check points, via entrance at the R27 access gate, entrance at the Duynfontein entrance and at Access Control Point 1 (ACP-1). All temporary worker/visitors permits are issued at ACP-1.

### **3.17.6.10. Prohibited/unauthorised items on Site**

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

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

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

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

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

### **3.17.6.11. Vehicles and tools/Equipment**

All Equipment and tools are subject to a security screening before they are allowed on the Site. All equipment and tools must be listed and specified before they are brought on Site. This list will serve as evidence for removal permits upon Completion of the *works*. Vehicles are only allowed on Site if justification is provided to the *Employer's Representative* that such a vehicle is essential to Provide the Works.

### 3.18. Contractor's management, supervision and key people.

#### 3.18.1. Minimum requirements of people employed

- The *Contractor* employs in and about Providing the Works only such persons that are careful, competent and efficient in their several trades and callings;
- It is expected that the *Contractor* will have as a minimum on his execution team:
  - Team leader / supervisor (full time)
  - Managerial capabilities will be present on site when required.
- The *Contractor*, in and about Providing the Works, ensures that all the requirements of 3.14 above is adhered to.
- The *Contractor* provides orientation and technical training for all key personnel requiring access to the Site in accordance with the requirements of the *Employer's* Radiological Safety Regulations, the *Employer's* Industrial Safety Programme, and, in general, the whole framework of plant rules (as applicable) and regulations which may be in force at the Site from time to time, which is available on request.

#### 3.18.2. Key personnel:

- The *Contractor* ensures that all key employees assigned to the *works* meet the requirements of the *Employers* security and medical qualifications as well as training and experience generally required by similar utilities elsewhere in respect of similar work. Where required, these staff members also meet such requirements as the National Nuclear Regulator may stipulate from time to time; as well as the Construction Regulations 2003 of the OSH Act, the Project and Construction Management Professions Act 48 of 2000 and CIDB Civil Engineering (CE) (At the appropriate level), as applicable; and
- *Contractor's* supervisors are deemed to be key people and are dedicated to each project on a full-time basis.
- The *Contractor's* construction health and safety agent (as a specified category in terms of section 18 (1) (c) of the Project and Construction Management Professions Act No. 48 of 2000) is appointed to ensure that the *Contractor* complies with its statutory duties under the OHSA (Act No. 85 of 1993) and applicable regulations such as the Construction Regulation, etc.
- The following are considered key persons by the *Employer* and the *Contractor* submits a brief CV with associated records of qualification and related experience to the *Employer's Representative* at the *start date*:
  - *Contractor's* project manager
  - *Contractor's* planner
  - Construction and installation supervisor(s)
  - Quality assurance representative
  - Quality control inspector(s)
  - Health and safety representative
  - Environmental Control Officer (ECO)

#### 3.18.3. Supervision

The South African Construction Regulations require the *Contractor* to appoint a full-time competent employee to supervise the performance of construction work. The *Contractor* (as principal *Contractor* in terms of the Occupational Health and Safety Act (OHSA) Construction Regulations) therefore appoints, in writing, a competent full time construction supervisor and where required an assistant supervisor, clearly stipulating all duties relating to the supervision of the particular project.

The *Contractor's* construction supervisor must be registered as a professional construction manager in terms of the Project and Construction Management Act, 48 of 2000.

The *Contractor* may appoint additional people (assistant construction supervisor) to assist the construction supervisor to perform certain of his functions, but this does not relieve the construction supervisor of his or her responsibilities under the regulations. If the *Contractor* has not appointed additional people to assist the construction supervisor, and an inspector determines that the construction supervisor needs assistance, he can instruct the *Contractor* to do so, at no additional cost to the *Employer*.

No work may be performed, by the *Contractor*, unless in the presence of the *Contractor's* construction supervisor or assistant construction supervisor.

The *Contractor's* construction supervisor and assistant construction supervisor shall be fully conversant with the contents of the *Contractor's* health and safety plan including the following and shall stop any or all work which is not in line with these provisions:

- Risk assessments,
- Method statements, and
- Fall protection plan.

#### **3.18.4. Hours of work**

All work will be performed during normal working hours, i.e. Monday to Thursday from 07h30 to 16h35, with a lunch break of 35 minutes, and Fridays from 07h30 to 13h30, with no lunch break. Additional hours may be required if emergencies occur (such as veld fires, etc.). This requirement should be catered for. It will be the responsibility of the *Contractor* to ensure that his employees are on time for work.

#### **3.18.5. Emergency mustering, accountability and evacuation**

Due to the nature of the Site, the *Contractor* is required to have full accountability of personnel at all times. It is therefore required that the *Contractor* has and maintains a current status and accountability list of all his personnel on the Site. The accountability list is handed to the *Employer's Representative* each time a change occurs.

The *Contractor* ensures that his Site representative takes full responsibility of this requirement and that he and his personnel are fully conversant with the mustering requirements as detailed in the *Employer's* procedure KAA-611.

#### **3.18.6. Working on the site**

The *Contractor* adheres to the *Employer's* procedure re. Fitness For Duty (FFD) requirements for vendors and *Contractors* who are required to perform work inside the owner controlled areas of KNPS (335-68). This document is not applicable to visitors. Accesses for visitors are dealt with in KAA-777.

The objective of the *Employer's* FFD programme is to provide reasonable assurance that the *Contractor's* Site 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.

#### **3.19. Quality assurance requirements**

The *Contractor* complies with the *Employers* Quality Management requirements stipulated in DSG-318-087 Rev 1 Quality Requirements for Procurement of Assets Goods and Services. The *works* are classified as Q2/L3 service.

The *Contractor* compiles and submits to the *Employer's Representative*, for acceptance, a quality control plan (QCP), showing all agreed hold, witness and verification points prior to commencement of the *works*.

#### **3.20. Subcontracting**

The *Contractor* does not Sub-contract more than 10% of the *works*.

#### **3.21. Cooperating with and obtaining acceptance of Others**

The *Contractor* maintains at all times a harmonious relationship with and co-operates with the *Employer* and all its suppliers and sub-suppliers or their employees who may be involved.

Each Party is responsible for all dealings with government and local authorities relating to its role in terms of the *conditions of the contract* and obtains and maintains at its own expense such permits, licences, and authorisations as may be required in this regard.

Requirements for liaison with Others may be required in the following instances:

- Tests and inspections that are to be done by third-party agents on behalf of the *Employer*;
- Licence, permit, or authorising agents to meet statutory requirements for delivering the *works* to the *Employer*.

### 3.22. Control of noise, dust, water and waste

The *Contractor* executes the *works* in a manner that ensures dust and noise control measures and shall dispose waste safely.

### 3.23. Requirements for the programme

The *Contractor* is required to submit a detailed programme within 1 (one) week of the *starting date* to the *Employer's Representative* for acceptance. The programme shall indicate start and finish duration's of all activities with milestones, deadlines and the *Contractor's* plan of execution. The activities are viewed as an entire project and activities can be planned in parallel with each other.

The *Employer* requires the following activities to be included in the *Contractor's* programme:

- 4 weeks for the enrollment and completion of the FFD authorization of the *Contractors* staff, see FFD Enrolment Map for clarity on the timelines,
- 3 weeks for review and approval of the H&S file by the *Employer's Representative*,
- 1 week for the review and acceptance of the facility maintenance manual and maintenance basis by the *Employer's Representative*,
- 1 week for commissioning and testing,
- 48 hours' notice for all inspections to be performed by the *Employer's Representative*.
- the *starting date*, access dates and Completion Date,
- planned Completion,
- the order and timing of the operations which the *Contractor* plans to do in order to Provide the Works,
- the order and timing of the activities of the *Employer* and Others as last agreed with them by the *Contractor* or, if not so agreed, as stated in the Works Information,
- the dates when the *Contractor* plans to meet key dates and to complete other activities needed to allow the *Employer* and Others to do their activities,
- provisions for
  - public holidays,
  - float,
  - time risk allowances,
  - health and safety requirements and
- the procedures set out in this contract,
- the dates when, in order to Provide the Works in accordance with his programme, the *Contractor* will need:
  - access to a part of the Site if later than its *access date*,
  - acceptances,
  - Plant and Materials and other things to be provided by the *Employer* and
  - information from Others,
- for each operation, a statement of how the *Contractor* plans to do the work identifying the principal Equipment and other resources which he plans to use.

### 3.24. Services and other things provided by the *Employer*

Item	Date by which it will be provided
Electricity point within 100 m	On Site establishment
Hot Work Permits	As required
Area for site establishment as agreed by the Site Establishment Plan.	As required
A single DECT phone for communication	As required, but limited to availability

## **4. Appendixes**

### **4.1. Overhead beam**

### **4.2. Concept drawing for Bulk dry chemical storage**

### **4.3. Concept drawing for Bulk dry chemical storage**

### **4.4. DSG-318-087 Rev 1 Quality Requirements for Procurement of Assets Goods and Services**

### **4.5. User Requirement Specification NPM21/008**

## C4: Site Information

### 1. Topographical

#### 1.1. Location of the Site

The Site is located within ACP-2 at Koeberg Nuclear Power Station (KNPS) north of Melkbosstrand in the South Western Cape and is reached via the main road from Cape Town to Saldanha (R27). The turn off to KNPS is indicated on the R27. KNPS is approximately 30km north of Cape Town and the approximate co-ordinates are 33° 40.7'S and 18° 26.1'E.

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

#### 1.2. Security check points

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

#### 1.3. The *works* will be located at the site as depicted in Figure 1 above.