



NEC3 Engineering and Construction

Short Contract (ECSC3)

A contract between Eskom Holdings SOC Ltd

and

for Roof and Ceiling Repairs MSB Complex

Contents:	Compiled in accordance with CIDB Standard for Uniformity in Construction Procurement (May 2010 amendments)	Page No.
Part C1	Agreements & Contract Data	
	C1.1 Form of Offer and Acceptance	
	C1.2 Contract Data provided by the <i>Employer</i>	
	C1.2 Contract Data provided by the <i>Contractor</i>	
Part C2	Pricing Data	
	C2.1 Pricing assumptions	[•]
	C2.2 Price List	
Part C3	Scope of Work	
	C3.1 Works Information	[•]
Part C4	Site Information	[•]
CIDB Grading:	PE 7CE, 9GB, 5SQ	

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 for the procurement of:

Roof and Ceiling Repairs of the Maintenance Service Building (MSB) Complex

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 VAT is	
Value Added Tax @ 15% is	
The offered total of the Prices inclusive of VAT is	
(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:

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

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

Signature(s)

Name(s)

Capacity

**for the
Employer**

Koeberg Nuclear Power Station
R27 Off West Coast Road
Melkbosstrand
Cape Town, 7441

Name &
signature of
witness

Date

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	N/A	N/A
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A
5	N/A	N/A
6	N/A	N/A
7	N/A	N/A

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 _____

Koeberg Nuclear Power Station
 R27 Off West Coast Road
 Melkbosstrand
 Cape Town, 7441

Name & signature of witness _____

Date _____

C1.2 Contract Data

Data provided by the *Employer*

Clause	Statement	Data
General		
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1 & 14.4	The <i>Employer's</i> representative to whom the <i>Employer</i> in terms of clause 14.4 delegates his actions ¹ is (Name):	Buyisile Khwelelani
	Address	Koeberg Nuclear Power Station R27 Off West Coast Road Melkbosstrand Republic of South Africa
	Tel No.	021 550 5753
	E-mail address	KhweleB@eskom.co.za
11.2(11)	The <i>works</i> are	the roof and ceiling repairs of the Maintenance Building (MSB) Complex
11.2(13)	The Works Information is in	the document called 'Works Information' in Part 3 of this contract.
11.2(12)	The Site Information is in	the document called 'Site Information' in Part 4 of this contract.
11.2(12)	The <i>site</i> is	The areas associated with the <i>works</i>, are within the boundaries of Access Control Point 2 (ACP 2) at Koeberg Nuclear Power Station
30.1	The <i>starting date</i> is.	1 May 2026
11.2(2)	The <i>completion date</i> is.	31 May 2027
13.2	The <i>period for reply</i> is	1 (one) week
40	The <i>defects date</i> is	52 (fifty-two) weeks after Completion
41.3	The <i>defect correction period</i> is	2 (two) weeks
50.1	The <i>assessment day</i> is the	between the 25th and 24th day of each successive month
50.5	The <i>delay damages</i> are	0,1% of the value of the Contract
50.6	The retention is	10% of the Prices at the Contract Date

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

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 relevant to the event
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 www.ice-sa.org.za) 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 <i>Adjudicator nominating body</i>
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 www.ice-sa.org.za) 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 conditions of contract are the NEC3 Engineering and Construction Short Contract (April 2013)²³ and the following additional conditions Z1 to Z14 which always apply:
Z1	Cession delegation and assignment
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.

Z2	Change of Broad Based Black Economic Empowerment (B-BBEE) status
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> .
Z3	Confidentiality
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

² If June 2005 Edition applies, delete April 2013 and insert June 2005

³ 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.

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

	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.
Z4	Waiver and estoppel: Add to clause 12.2:
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.
Z5	Health, safety and the environment
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"> • accepts that the <i>Employer</i> may appoint him as the “Principal Contractor” (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) (“the Construction Regulations”) for the Site; • warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of <i>works</i>; and • undertakes, in and about the execution of the <i>works</i>, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the <i>Contractor’s</i> direction and control, likewise observe and comply with the foregoing.
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.
Z6	Provision of a Tax Invoice and interest. Add to clause 50

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

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.
Z7	Notifying compensation events
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</i> representative's 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</i> representative' 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.
Z8	<i>Employer's</i> limitation of liability; Add to clause 80.1
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).
Z9	Termination: Add to clause 90.2, after the words "or its equivalent":
Z9.1	or had a business rescue order granted against it.
Z10	Addition to Clause 50.5
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 <i>works</i> .
Z11	Ethics
For the purposes of this Z-clause, the following definitions apply:	

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

Affected Party	means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i> or a third party, such party's employees, agents, or Subconsultants or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
Coercive Action	means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
Collusive Action	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
Committing Party	means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,
Corrupt Action	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
Fraudulent Action	means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
Obstructive Action	means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and
Prohibited Action	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.
Z11.1	A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
Z11.2	The <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.

Z12 Insurance

Z12.1 Replace core clause 82 with the following:		
Insurance cover	82	

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

82.1	When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.														
82.2	<p>The <i>Contractor</i> provides the insurances stated in the Insurance Table A, from the <i>starting date</i> until the earlier of Completion and the date of the termination certificate.</p> <table border="1" data-bbox="475 416 1398 1966"> <thead> <tr> <th colspan="2" data-bbox="491 450 1382 488">INSURANCE TABLE A</th> </tr> <tr> <th data-bbox="491 495 916 577">Insurance against</th> <th data-bbox="916 495 1382 577">Minimum amount of cover or minimum limit of indemnity</th> </tr> </thead> <tbody> <tr> <td data-bbox="491 577 916 853">Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property</td> <td data-bbox="916 577 1382 853">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.</td> </tr> <tr> <td data-bbox="491 853 916 1128">Loss of or damage to Plant and Materials</td> <td data-bbox="916 853 1382 1128">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.</td> </tr> <tr> <td data-bbox="491 1128 916 1404">Loss of or damage to Equipment</td> <td data-bbox="916 1128 1382 1404">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 <i>Employer's</i> insurance.</td> </tr> <tr> <td data-bbox="491 1404 916 1738">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</td> <td data-bbox="916 1404 1382 1738"><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.</td> </tr> <tr> <td data-bbox="491 1738 916 1966">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</td> <td data-bbox="916 1738 1382 1966">The amount required by the applicable law</td> </tr> </tbody> </table>	INSURANCE TABLE A		Insurance against	Minimum amount of cover or minimum limit of indemnity	Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.	Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.	Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by <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
INSURANCE TABLE A															
Insurance against	Minimum amount of cover or minimum limit of indemnity														
Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.														
Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.														
Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by <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														

Z13	Nuclear Liability
Z13.1	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.
Z13.2	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 47 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> .
Z13.3	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> .
Z13.4	The <i>Employer</i> does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
Z13.5	The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.
Z14	Asbestos
For the purposes of this Z-clause, the following definitions apply:	
AAIA	means approved asbestos inspection authority.
ACM	means asbestos containing materials.
AL	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4-hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
Ambient Air	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
Compliance Monitoring	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
OEL	means occupational exposure limit.
Parallel Measurements	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

Safe Levels	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
Standard	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
SANAS	means the South African National Accreditation System.
TWA	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4-hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.
Z14.1	The <i>Employer</i> ensures that the Ambient Air in the area where the <i>Contractor</i> will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short-term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.
Z14.2	Upon written request by the <i>Contractor</i> , the <i>Employer</i> certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The <i>Contractor</i> may perform Parallel Measurements and related control measures at the <i>Contractor's</i> expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
Z14.3	The <i>Employer</i> manages asbestos and ACM according to the Standard.
Z14.4	In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
Z14.5	The <i>Contractor's</i> personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
Z14.6	The <i>Contractor</i> continues to Provide the Works, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
Z14.7	Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the <i>Employer</i> at the <i>Employer's</i> expense, and conducted in line with South African legislation.

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	
11.2(10)	The offered total of the Prices is [Enter the total of the Prices from the Price List]:	

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.

C3 Scope of Work

C3.1 Works Information

1. Description of the works

The *works* are for the completion of the roof and ceiling repairs of the Maintenance Service Building (MSB) at Koeberg Nuclear Power Station (KNPS).

The *works* include but are not limited to:

The Contractor is to submit a quotation for the supply of all labour, materials, equipment, and other services required to perform the work successfully.

The scope of work entails the following:

Roof Cladding:

3.1.1 The Contractor shall install a roof-cladding spacer system similar to the AshGrid™ Overlay Cladding System above the existing roof cladding.

- 3.1.1.1 The roof consists of 3 duo-pitched structural roof structures with a total surface area of 4 000m²
- 3.1.1.2 The cladding sheets to be installed with the spacer system must be resistant to coastal marine corrosive conditions.
- 3.1.1.3 The Contractor must submit a technical specification of the proposed sheeting and spacer system to the Employer for review and acceptance during the tendering stage.

3.1.2 The Contractor shall remove and replace all existing asbestos drainage gutters and downpipes with fibre cement drainage gutters and downpipes. The estimated linear length of the gutters is 600m with 72 x 2.8m downpipes.

- 3.1.2.1 Drainage Gutters and downpipes must be resistant to coastal marine corrosive conditions.
- 3.1.2.2 The Contractor must submit a technical specification of the proposed drainage gutters and downpipes to the Employer for review and acceptance during the tendering stage.

3.1.3 The Contractor shall clean all existing PVC drainage systems (gulleys and concrete embedded pipes) utilising high-pressure water jetting to enable free drainage of newly installed downpipes to the ground stormwater system.

3.1.4 The Contractor shall sieve or clean sand particles from the aggregates stones to allow for free drainage of the concrete roof slab.

3.1.5 The Contractor shall re-apply the water proofing on the entire concrete slab in accordance with 331-170: Requirements for Protective Coating for Use at KPNS.

3.1.6 The Contractor shall remove and replace all existing roof ceiling panels, supports, and associated fixings, including ties and timber beams, as well as all ceiling-affixed HVAC and electrical systems.

- 3.1.6.1 Ceiling Panels and Supports: All ceiling panels, supports and associated fixings are to be replaced with similar or equivalent products.
- 3.1.6.2 HVAC Systems: The Contractor shall remove, temporarily disconnect, and reinstate or replace all ceiling-mounted HVAC components, including air diffusers, grilles, ductwork, and any ceiling-integrated air handling equipment, ensuring proper function upon reinstallation.

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

- 3.1.6.3 Electrical Systems: The Contractor shall remove, temporarily disconnect, and reinstate or replace all ceiling-affixed electrical components, including lighting fixtures, switches, sockets, conduits, and wiring, ensuring compliance with all relevant standards.

3.1.7 The Contractor shall appoint an engineering consultant firm to provide the following services.

Architectural Services:

- 3.1.7.1 Appoint a professionally registered architect to design the required roof flashing in order to the close gaps between existing roof cladding and the newly installed roof system.
- 3.1.7.2 Generate new roof drawings to reflect all amended changes by the Contractor.
- Engineering Services:
- 3.1.7.3 Appoint a professional registered structural engineer.
- 3.1.7.4 The structural engineer is to analyse the existing structure and make recommendations where additional members (purlin, bracing, sag bars and rafters) are required to strengthen the roof.
- 3.1.7.5 The structural engineer is to analyse the impact of the weight of the additional overlaid roof cladding spacer system on the roof's support beams.
- 3.1.7.6 Provide detailed calculations indicating how the roof support beams are analysed for additional roof-cladding spacer system weight.
- 3.1.7.7 Generate new roof drawings to reflect all amended changes by the Contractor.

The *Contractor* compiles and submits an as-build close-out report documenting/recording the replaced bolts and nuts and their interface building.

2. Drawings

Drawings when applicable will be defined by the structural engineer and architect after the inspection is conducted and for the *Employer* to review and concur.

- All documentation, including drawings, are uniquely identified and cross-referenced with all related documents. Document deliverables are provided in electronic, searchable format (PDF) and includes all signatures obtained internally.
- Once the document deliverable has been accepted by the *Employer*, the *Contractor* provides, in addition to the electronic submission, one hardcopy version of the document.
- The *Contractor* requests sequential drawing and document numbers from the *Employer* (where applicable).
- All new drawings are handed to the *Employer* in the electronic media (e.g. .dgn format) which is compatible to Microstation Version 7 (or higher) software program.
- All new drawings are sized to metric paper size standards (A4, A3 etc.).
- The *Contractor* identifies and provides the update requests for affected drawings, documents, and procedures.
- Any drawings, designs, materials used, structural integrity testing and any other similar information applicable to the project will be placed on the *Contractor's* health and safety file.

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

3. Specifications

Title	Date or revision	Tick if publicly available
<u>General Specifications:</u>		
240-73416879: Health and Safety requirements: SHE Specification for Construction Work		
32-136: Contractor Health and Safety Requirements		
32-418: Eskom Working at heights Standard		
240-43921898: Annexure C 4: OHS Tender Evaluation Template (Construction)		
NEMA: National Environmental Management Act (Act 59 of 2008).		
KAE-012: Hazardous and Non-Hazardous Waste and Scrap Disposal		
KAA-751: Chemical restrictions and controls at Koeberg (CRACK) programme		
Environmental Authorisation 12/12/20/997		
Construction Checklist (KGA-073)		
335-67: Fitness for duty requirements for the Koeberg site		
335-68: Fitness for duty process for contractors who are required to perform work inside the owner controlled area of Koeberg Nuclear Power Station		
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
Procedure 32-95 - Environmental, Occupational Health and Safety Incident Management Procedure		
Health and safety plan (CR 7 (1)a)		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

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

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		
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
ISO 9001: Quality Management Systems		
Act 85 of 1993: Occupational Health and Safety Act (OHSAct).		X
Act No 103 of 1977 - National Building and Regulation Act.		X
OHSAct: Occupational Health and Safety Act (85 of 1993) - Regulation 2281, Environmental Regulations for Workplaces, 1987		x
SANS 1186-1: Symbolic safety signs Part 1: Standard signs and general requirements		X
SANS 10400-T: The application of the National Building Regulations Part T: Fire protection		X
KSA-022: Control of Compressed Gases.		
SANS 10087 Handling, Storage, Distribution and Maintenance of Gases in Domestic, Commercial and Industrial		x
KSA-097: Fire Prevention Standard for Stores and Storage Practise.		
331-170: Requirements for Protective Coating for Use At KPNS		
KAA-502: Project Management Process for New Building and Civil Projects and Changes to existing building and Civil Projects at Koeberg Nuclear Power Station		
238-103: Supplier Quality General Requirements		

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

KSA-119: Management and Control of Supplemental Workers Koeberg Nuclear Power Station		
KSA-011: The Requirements for Controlled Documents		
Act No 48 of 2000 Project and Construction Management Profession Act		X
0001/96Q rev0: Offsite and onsite inspection services		
GGP 0462: Quality requirements for Works Under Construction		
32-421: Eskom cardinal rules - The employer takes a zero tolerance stance to the violation of these rules		
KAA-611: Emergency mustering accountability and evacuation		
KAA-647: Control of non-routine testing		
KAA-648: Administration and responsibilities for requalification testing		
KAA-785: Safety, health and environmental audits at Koeberg Nuclear Power Station		
KGA-067: Safety, health and environmental risk assessment guide		
KGA-073: SHE specification guideline		
KSA-011: The requirements for controlled documents		
KSA-109: Requirements for access authorisation to Koeberg Nuclear Power Station		
OPR 3305: Plant Safety Regulations		
32-95 - Environmental, Occupational Health and Safety Incident Management Procedure		
<u>Technical specifications:</u>		
Technical specification if/when applicable will be defined in the scope of <i>works</i> .	0	
Civil structure inspection summary report	0	
Repair of roof cladding recommendation(s) for the (MSB)	06 June 2022	
Ashgrid-spacer-support-system technical brochure	August 2014	
331-170 Requirements for Protective Coating for use at KNPS	1	

4. Constraints on how the *Contractor* Provides the Works

General Requirements

- During the execution of this Contract, other *Contractors* will be performing work on the plant and the *Contractor* must take due cognisance of this in planning and executing the *works*.
- All work is subject to, at any given time, inspections from the *Employer's* various Groups, i.e. Safety Risk Management, Fire Risk Management, Inspection & Test, Engineering, and Quality Assurance/Quality Control.
- All electrical equipment is checked prior to start of any *works* by the *Employer's* electrical maintenance department for safety compliance.
- Some of the *Contractor's* personnel are to be qualified Radworkers (Training will be provided by the *Employer*).
- The *Contractor* ensures that any service rendered does not interfere with the *Employer's* scheduled work and should align himself with *Employer's* work control process.
- All material manufactured and procured for the *works* must be delivered to the *site* in accordance with the *site* requirements. The *Contractor* ensures that he informs the *Employer* in advance that the material is en-route to the *site*. Upon arrival at the site all the material is subject to receipt inspection prior to commencement of any installation. For the receipt inspection the *Employer* requires a full set of quality inspection documentation as determined by the applicable codes and quality assurance system used during the manufacture of the material. The *Contractor* shall ensure that the manufacturer's recommendations regarding shipping and packaging are adhered to and shall ensure that all materials are packaged and stored such that their condition will not deteriorate due to the environment. The materials shall not be used past their shelf-life expiry date.
- The *Contractor* must be a structural steel *Contractor* with prior experience in roofing and refurbishment works.
- The *Contractor* must be a certified installer or alternatively undergo the required certification prior to commencement of *works*.
- The *Contractor* must submit a Safety, Health and Environmental (SHE) file specific to the work scope and a quality check plan (QCP) (required after contract appointment) for acceptance by *Employer*.
- The *Contractor* submits a Quality Assurance Program in accordance with 238-103 Rev 2. A Quality Control Plan, specific to each construction activity, is to be established and submitted to the *Employer* for acceptance before commencement of any work indicating activities, responsible persons, hold and witness points
- The *Contractor* must appoint a qualified QC representative for QC approvals and Site supervision.
- The *Contractor* takes full responsibility for removing old material from the Site and the disposal.
- Structural steel *works* shall be performed, by the *Contractor*, in accordance with the SANS standard specification for Construction *works* Part CS1: Structural steelwork SANS 2001 CSI.
- Cladding fasteners *works* shall be performed, by the *Contractor*, in accordance with the SANS standard specification for Fasteners for roof and wall coverings in the form of sheeting SANS 1273.
- Roof and side cladding *works* shall be performed, by the *Contractor*, in accordance with the SANS standard specification for Roof and side cladding SANS 10237.

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

- Roof support beam analysis shall be performed, by the *Contractor*, in accordance with the SANS standard specification Basis of Structural Design and Actions for Buildings and Industrial Structures SANS 10160 and structural use of steel SANS 10162.
- Roof and side cladding *works* shall be performed, by the *Contractor*, in accordance with the SANS standard specification for Roof and side cladding SANS 10237.
- All drawings shall be performed, by the *Contractor*, in accordance with the SANS standard specification for Building Drawing Practise SANS 10143:
- The *Contractor* shall supply all labour, materials, tools, Equipment, packaging and shipment to the site required to perform the *works* as stated in section 3.
- *Employer* will provide electrical power (220v single phase) and potable water. However, the *Employer* takes no responsibility should these services not be available.
- The *Contractor* is to supply his own ablution facilities.
- The *Contractor* is to submit a close-out report documenting/recording the replaced parts and their interface with the building.
- *The Contractor* is to supply the *Employer* with all maintenance manuals of all installed features (Cladding, drainage pipes, ceiling panels, etc) as part of the close-out report documenting/recording.

Asbestos Handling and Disposal

- Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos *Contractor*, instructed by the *Employer* at the *Contractor's* expense, and conducted in line with South African legislation.
- The *Contractor* must be registered with the Department of Employment and Labour as Type 2 registered asbestos contractor (RAC)
- The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the *works* conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short-term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.
- Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved inspection authority (AIA). The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in bullet 4 above. Control measures conform to the requirements stipulated in the AIA-approved asbestos work plan.

4.1 Meetings

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

Project kick-off meeting

Interval	Location	Attendance by:
Once off meeting	KOU	<i>Employer, Contractor and Others as required</i>

4.1.1 Risk reduction meetings

Interval	Location	Attendance by:
Adhoc	KOU or Tele / Video Conference	<i>Employer, Contractor and Others as required</i>

4.1.2 Operational meetings

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

An operational meeting is held, by tele- or video conference, if necessary, between the *Employer* and the *Contractor's Project Manager* 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.

4.1.3 Implementation meeting for specific progress/QC and feedback

Interval	Location	Attendance by:
Daily during implementation	KOU	<i>Contractor</i>

The implementation meeting is held between the *Contractor* and *Supervisor's* 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*.

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.

4.1.4 Meetings of a specialist nature

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

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*.

4.1.5 Post-implementation meeting for project feedback and review

Interval	Location	Attendance by:
Post unit implementation	KOU	<i>Employer, Contractor Senior Manager (not the Contractor's Project Manager), Contractor's Project Manager, Employer's personnel, Others as required</i>

The post-implementation meeting is held between the *Employer, Contractor Senior Management, Supervisor, Outage control centre management* and 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* 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.

4.2 Quality Assurance Programme

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

The works are subject to a Quality Assurance Programme that meets the intent of a Quality Management System (QMS) based on ISO 9001:2015.

The *Contractor* implements and maintains a quality assurance programme that as a minimum meets the requirements of the *Employer*.

The *Contractor* shall submit all documentation (QCP's, specifications, procedures, etc.) related to quality assurance to the *Employer* for review by the *Employer* prior to any manufacturing taking place.

The *Employer* or his appointed quality assurance representative reserves the right of access to Designer's records for the purpose of inspections or audits. The contact details of the quality assurance representative are obtainable from the Project Manager.

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

The *Contractor* controls and supervises his subcontractor's quality plans (including manufacturing quality plans). The *Contractor* reviews and accepts all plans, prior to submission to the *Employer*, for his acceptance. All subcontractor components are verified by the *Contractor's* technical representative(s) before use or installation.

The *Contractor* ensures that its personnel are conversant with the content of the works information, quality control plans and work instructions

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

The Quality Assurance Data Pack (QADP) requirements are as follows and shall include as applicable:

- i. Examination and Inspection Control.
- ii. Final Testing (Verification of Conformance to Requirements).
- iii. Documentation.
- iv. Final Inspection and Test Reports/Results.
- v. Certificate of Conformance (C.O.C).
- vi. Material Certificates, Shelf Life and Cure Dates.
- vii. Meetings between the Designer and the client (KNPS) regarding the progress of the design will be held once a week.

Supporting documentation shall be supplied, before installation that demonstrates the Designer and sub-contractors competence, including experience, in the design, manufacture and installation of the equipment covered in this specification.

The design shall clearly stipulate that the various phases of the electrical *works* shall be identified.

The systems and components of this specification shall be certified (e.g. Certificates of Conformance), and performance requirements met and documented, prior to handover.

4.3 Health and Safety

4.3.1 Nuclear Safety

The *Contractor* promotes a culture that is dedicated to continuously striving to enhance nuclear safety.

The *Employer* defines appropriate safety objectives for the KOU, 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.

4.3.2 Employer's lifesaving rules

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

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

4.4 Environmental Constraints and Management

The *Contractor* shall comply with the following environmental criteria and constraints:

4.4.1 General requirements

The *Contractor* complies with all the Environmental laws as stated in NEMA – South Africa National Environmental Management Act – Legislation and Environmental Acts and the National Environmental Management (NEM): Waste Act and all other applicable legislation pertaining to Waste Management Services.

The *Contractor* shall comply with the *Employer's* Hazardous and Non-Hazardous Waste and Scrap Disposal procedure

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

4.4.2 Storm water

No washing of chemicals shall be drained into the stormwater reticulation system (this includes but not limited to drains, culverts and channels).

4.4.3 Waste

All waste such as chemical waste, general waste, building rubble, used solvents, empty paint drums, etc., must only be disposed inside a marked waste skip or container on Site. No waste mixing on site will be allowed.

4.4.4 Asbestos-waste

Asbestos waste must be covered completely with double, impermeable material sealed with tape and labelled so that no fibres can break off and be dispersed into the atmosphere, before transportation.

4.4.5 Oil usage during construction

The oil to be used on site by the *Contractor* for machineries must be contained within the bund structure. This will eliminate any spillage on the ground that can be washed away into the storm water draining system.

4.4.6 Dust

The *Contractor* must properly control dust on Site by sprinkling dusty areas with water. Anyone within the construction area with such hazard must be supplied with dust masks.

4.4.7 Noise

The *Contractor* must ensure that no excessive noise making machineries are used on Site. If such machinery is to be used, written approval must be obtained from the *Project Manager*. The *Contractor's* application to use such machinery must be accompanied by a detailed plan indicating the safety plan and times interval for the usage of the machinery.

4.4.8 Plant and Materials

The *Contractor* shall ensure that all Plant and Materials, services and work supplied in terms of this contract conform to all applicable environmental legislation and in the *Contractor's* residing country and to the *Employer's* environmental specifications. The *Contractor* ensures that the *Employer's* chemical restrictions and controls at Koeberg (CRACK) programme (KAA-751) are adhered to.

The design document produced by the Designer will specify all installation activities for the successful achievement of the URS requirements.

4.5 People

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

The *Contractor* employs in and about the Provision of the Works only such persons that are careful, competent and efficient in their several trades and callings, to achieve nuclear safety, and the *Employer* reserves the right to object to and require the *Contractor* to remove from the *works*, forthwith, any person employed by the *Contractor* in or about the Provision of the Works who, in the opinion of the *Project Manager*, misconduct's himself or is incompetent or negligent in the proper performance of his duties and such person is not again employed for the *works* without the written permission of the *Project Manager*.

The *Contractor*, in and about the Provision of the Works, provide evidence of skills assessment (including qualifications) for all his staff. The *Contractor*, his QC and supervisors are required to present SAQA approved certificates (or equivalent), for the position that they fulfil. Any personnel that do not meet the panel requirements will have their access to *site* revoked. For mechanical contracts, the *Contractor* must demonstrate ASME construction and maintenance/testing skills, knowledge and oversight.

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

All engineering work is performed by suitable qualified and experienced individuals. The *Contractor* demonstrates to the *Employer's Representative*, for his acceptance, that the assigned persons fulfil these requirements and submits a brief CV of each engineer in and about the Provision of the Works. If design work is carried out in jurisdictions where engineering work is governed by a formal professional body, the engineers taking responsibility for the work must be registered as professional engineers with that body.

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

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

Key personnel

The *Contractor* ensures that all key personnel assigned to the *works* meet the requirements of the *Employer's* security and medical qualifications as well as training and experience generally required by similar utilities elsewhere in respect of similar work. Where required, these staff members also meet such requirements as the National Nuclear Regulator may stipulate from time to time.

Contractor Supervisors and Project Managers are deemed to be key people and are dedicated to each project.

The requirements for the qualification and experience for Key Personnel are as follows:

- Supervisor: Civil/Structural Engineering Diploma/ Degree and 3 -5 years relevant experience or Grade 12 certificate and 7 – 10 years of onsite experience related to the construction of Structural/Building Works including roof specialist works.
- Project Manager: NQF6 or Construction Management Diploma with 7 -12 years practical experience or Degree with 5 -10 years practical experience as a Project Manager in Building Construction, refurbishment of Office Building/Industrial Roofs.

The *Contractor* provides orientation and technical training for all key personnel in accordance with the requirements of the *Employer's* Radiological Safety Regulations, the *Employer's* Industrial Safety Programme, and in general the whole framework of plant rules and regulations which may be in force at the *Employer's* Site from time to time which is available on request.

The *Contractor* regularly reports person hours worked to the *Employer's Representative* on a monthly basis.

Due to the nature of an outage, the *Contractor* is required to provide the *works* on a 24-hour shift. The normal shift regime during an outage is from 7am to 7pm and then 7pm to 7am.

The *Contractor* must work on weekends and public holidays when required.

4.6 Use of standard forms

4.6.1 General requirements

Each instruction, certificate, submission, proposal, record, acceptance, notification and reply is communicated in a form which can be read, copied and recorded and in the language of the Contract, within the period for reply or any other period agreed between the parties prior to its due date.

Any such communiqué must bear the signature of the author; emails therefore do not conform except when used as a transmittal medium.

4.6.2 Minimum requirements

- All documents shall be written in 3rd person;
- All documents shall be in simple and clear English; and

- Always reference to applicable NEC ECSC clause under (or as a result of) which it is communicated.

4.6.3 Use of standard forms

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

- Delegation by *Employer*;
- Access;
- Early Warning by *Contractor*;
- Early Warning by *Employer's Representative*;
- Completion Certificate;
- Notification of Defect by *Employer's Representative*;
- Defect Certificate;
- *Contractor's* assessment of amount due;
- Compensation Event notification by *Contractor*;
- Compensation Event Request for Quotation by *Employer*;
- Termination Certificate;
- Acceptance submission by *Contractor*;
- *Employer's Representative* Instruction; and
- *Employer's Representative* summary of amount due.

4.7 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* as follows:

4.7.1 Assessments

The *Contractor* includes in the Monthly Planning Report the proposed assessment information. Failure to submit such information on the assessment date will result in the *Project Manager* making his own assessment, based on available information.

The *Contractor* submits, separately, all documentation and certification in support of the proposed assessment information.

The *Contractor* ensures that the requirement in terms of Section 20(4) (C) of the Value Added Tax Act 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 10(4) (C), is adhered to. No payment will be made on tax invoices not fully meeting this requirement.

The *Employer's* VAT Registration Number is **4740101508**

All invoices are marked for the attention of:

The Accounts Payable Section
Koeberg Operating Unit
Private Bag X10
Kernkrag 7440
South Africa

4.7.2 Particulars to be included on the *Contractor's* Tax Invoice:

- the name and address of the *Contractor*,
- the date of the invoice,

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

- an invoice number,
- *Contractor's* VAT registration number (if applicable),
- *Employer's* VAT registration number,
- reference to Contract and / or SAP Task Order number,
- the amount paid to date,
- the price adjustment for inflation (where clause X1 is applicable),
- the value of the invoice split into payments as per the Price List and
- a descriptive title of the *works* covered by the Invoice and / or the Contract's assessment number;
- To enable payment against each applicable SAP generated Task Order the *Project Manager* and the *Contractor* must sign next to each line acceptance of the *works*, Plant and Materials or goods delivered on the applicable SAP generated Task Order. The signed copy of this SAP generated Task Order is promptly returned to the *Project Manager*.
- Payment is made by means of electronic transfer. The *Contractor* therefore provides his banking details to the *Project Manager* 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.
- All invoices are submitted to the following email address
invoicessskomlocal@eskom.co.za

4.8 Records of Defined Cost

The *Contractor* shall submit forecasts of time charges for each assessment period and maintain records thereof.

Clear records of hours worked or time sheets in respect of all time charges shall be kept by the *Contractor* and shall indicate the resource utilised, location, duration, and times, associated expenses incurred, and a summary of the *works* rendered which shall be cross-referenced to deliverables rendered. The records of hours shall indicate the *Project Manager* the time spent. The *Project Manager* shall review all time sheets.

The *Contractor* shall maintain records of all documentation and make available to the *Employer* any or all such documentation on request.

4.9 Supplier Development and Localisation (SDL&I)

4.9.1 Designated Sectors

The below are confirmed to be designated sector that are applicable to this tender.

Material	Threshold %
Fabricated Structural Steel	100%
Joining/Connecting Components	100%
Frames	100%
Roof and Cladding	100%
Fasteners	100%
Wire Products	100%
Ducting and Structural pipework	100%
Gutters, downpipes & lauders	100%
Steel Value-added Products	
Plates	100%
Reinforcing bars	100%

Textile, Clothing, Leather and Footwear sector (applies to the PPE)	100%
--	------

4.9.2 Specific Goals – B-BBEE Preference points (80/20)

Supplier Name	B-BBEE Level	Expiry date	Points

4.9.3 CIDB and Contractor Skills development goals – CIDB Skills Development at 0.25% of the contract value as per the CIDB Level 6GB (General Building).

Supplier Name	CIDB Grade and level	Skills development

4.9.4 Subcontracting

Supplier	Sub-contractor details	% Sub-contracting and scope	B-BBEE levels sub – contractor

4.10 Facilities to be provided by the Contractor

Facilities to be provided by the *Contractor* are as noted on section 6 of this contract.

4.11 Design by the Contractor

4.11.1 Engineering and the Contractor’s design

The *Contractor* complies with all the requirements specified in the *Works* Information.

For all designs required by the *works*, the *Contractor* complies with the *Employer’s* procedure KAA 502 and ensures an ECSA registered Engineer approves all designs and design changes. The *Employer’s* Engineers will review the design to ensure integration.

The *Contractor’s* designer shall be required to perform engineering service.

4.12 Cataloguing requirements by the Contractor

Not applicable

5. Requirements for the programme

- The *Contractor* will compile a work plan for the execution of the *works* - to be submitted to the *Employer* for his approval prior to the start of the *works*.
- The *Contractor* shall provide the programme in MS Project.

6. Services and other things provided by the Employer

Electric power supplies

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

Electric power for construction is supplied free of charge, but connection fees are for the *Contractor's* account. All installations comply with the details set out under Construction Power Supplies, OH&SA (Act 85 of 1993).

Activity description	Project Manager	Contractor	Requirements	Planning	Additional notes
Electrical supply point	X		<ul style="list-style-type: none"> • Power supply points will be made available to which the <i>Contractor</i> interfaces for his power requirements. Three levels of power supplies are available: <ul style="list-style-type: none"> • 220V AC rated at 15 A at various positions on Site, • 380V AC three-phase rated at 32 A without neutral at various positions on the Site, 	As required	The <i>Employer</i> does not guarantee continuity of supply and no compensation events for standing time as a result of power failures will be considered.

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

Activity description	Project Manager	Contractor	Requirements	Planning	Additional notes
<p>Electrical leads and adapters / connectors and (where required) distribution system.</p>		X	<ul style="list-style-type: none"> • All leads, plugs, connections, and adapters shall be in good working order and comply with the requirements of the OH&S Act. • All portable electrical equipment used by the <i>Contractor</i> is clearly marked; regularly inspected for safety and a register kept of these inspections as required by the OH&S Act. Defective Equipment is removed from Site until restored to a good working order by the <i>Contractor</i>. • The <i>Contractor</i> provides and maintains an electrical distribution system (including temporary wiring, cabling, distribution boards, protection, metering etc.) to lead power from the <i>Employer's</i> supply point, to where it is required. On Completion the <i>Contractor</i> removes all such temporary distribution systems (included as part of the Work Plan). 	As required	<p>The <i>Project Manager</i> reserves the right to stop the <i>Contractor's</i> use of any electrical equipment or appliance that in the <i>Project Manager's</i> opinion does not conform to the foregoing.</p>

Lighting

Activity description	Project Manager	Contractor	Requirements	Planning	Additional notes
Temporary local lighting		X	<ul style="list-style-type: none"> Where applicable, the <i>Contractor</i> provides temporary local lighting in accordance with the safety requirements of the Occupational Health and Safety Act. 	As required	The <i>Employer</i> provides no additional lighting other than the local lighting installed and does not guarantee the serviceability or the availability of these installations.

Water

Activity description	Project Manager	Contractor	Requirements	Planning	Additional notes
Water supply point		X	<ul style="list-style-type: none"> Potable water is supplied at standard tapping points. 	As required	The <i>Employer</i> takes no responsibility for disruptions in the supply of water.
Water supply hoses, connectors, piping, and temporary plumbing and pumps.		X	<ul style="list-style-type: none"> All devices shall be in good working order and comply with the requirements of the OH&S Act. The <i>Contractor</i> provides and maintains all pipework and temporary plumbing and pumps necessary to lead the water from the <i>Employer's</i> points of supply to the various points where it is required. On Completion the <i>Contractor</i> removes such pipework, temporary plumbing, and pumps (included in the Work Plan). 	As required	

Sanitary facilities

Activity description	Project Manager	Contractor	Requirements	Planning	Additional notes
Sanitary facilities	X		<ul style="list-style-type: none"> The <i>Contractor</i> is allowed access to and use of the <i>Employer's</i> existing sanitary facilities. The <i>Contractor's</i> personnel maintain a clean condition of these facilities. Should temporary sanitary facilities be required, the <i>Contractor</i> provides these. 	Not applicable	

Office and personal Equipment

Activity/ description	Project Manager	Contractor	Requirements	Planning	Additional notes
Supply of phones, fax machine and computers including the microwave or radio link for connection to the external internet networks.		X		In accordance with <i>Accepted Plan</i>	<ul style="list-style-type: none"> No cellular, mobile phones or tablets are allowed on the Site. Telephone, fax, and LAN line account payments is for the <i>Contractor's</i> account The <i>Contractor</i> supplies the consumables required to provide the <i>service</i>. The <i>Contractor</i> shall provide and his use own tools, special equipment, IT hardware and software, PPE including COVID-19 face masks, stationery and acquire all necessary licences, permits and authorisations required to perform the <i>works</i>.

Activity/ description	Project Manager	Contractor	Requirements	Planning	Additional notes
					<ul style="list-style-type: none"> The <i>Employer</i> will supply a LAN connection, cable, and LAN usernames access for the <i>Contractor's</i> access to the <i>Employer</i> documents. The <i>Contractor</i> will provide his own internet access.

Canteen and snack bar

Activity/ description	Project Manager	Contractor	Requirements	Planning	Additional notes
Canteen, snack bar and vending supplies	X		<ul style="list-style-type: none"> The <i>Employer's</i> canteen and snack bar may only be used on a cash basis. The <i>Contractor</i> supplies vending machines if required. 	Not applicable	

C4: Site Information

C4.1: Information about the *site* at time of tender which may affect the work in this contract

4.1.1 Access limitations

The *site* is located at Koeberg Nuclear Power Station (KNPS) north of Melkbosstrand in the 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.

4.1.2 Employer's Site Access Control

4.1.3 Fitness for duty management

The *Contractor* adheres to the *Employer's* procedure with regards to fitness for duty (FFD) requirements for vendors and *Contractors* who are required to perform work inside the Owner Controlled Areas of the 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 perform their duties safely and competently. 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 encounter.

4.1.4 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	Project Manager / Employer	Contractor	Requirements	Planning	Additional Notes
Recruitment & Selection		X		<i>Contractor's</i> own planning	
ID Document		X	Proof of identification is required before 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"> • South African Identification Book issued by the Department of Home Affairs. (Green ID) or • Valid Official Passport or • Valid Temporary Identification Document issued by the Department of Home Affairs.
Proof of Residential Address		X	Proof of residential address is required before 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	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> • CVs of <i>Contractor's</i> employees are included in the documents where

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning	Additional Notes
			before registration takes place		<p>this is required by the procedure.</p> <ul style="list-style-type: none"> • The <i>Contractor's</i> employees must be in possession of his/her CV when he/she arrives on <i>site</i> to start the FFD process. • The <i>Contractor</i> is required to verify the authenticity of the qualifications that is 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. • 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. • 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).
Criminal History		X	Assessment of criminal history	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> • Terminate Process Hold Point • The criminal history of an applicant shall be assessed before access to the Site is considered. • SA citizens obtain their criminal history reports from the South African Police (SAPS). The report may not be older than 3 months when the <i>Contractor's</i> employee is enrolled on the FFD

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning	Additional Notes
					<p>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.</p> <ul style="list-style-type: none"> • Non-South African citizens are required to provide proof of their criminal history. The criminal history report from their country's law enforcement agency or INPO (USA citizens only) is dated within three months of their required access date. • Persons with a criminal background that is deemed to be a security risk to the Site are not to be considered for employment by the <i>Contractor</i>. • 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.
Complete Man Job Spec Form	X	X	<i>Contractor</i> to complete with <i>Project Manager</i>	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> • The <i>Contractor</i> ensures that an occupational health services job specification form is completed, in conjunction with the <i>Project Manager</i>, for each of his employees and all signatures are obtained before the health assessment is arranged. • These forms are obtainable from the <i>Employer</i> at Koeberg. The form identifies the

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning	Additional Notes
					<p>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.</p> <ul style="list-style-type: none"> 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 <i>site</i> to start the FFD process.
Drug Test		X	Negative drug test to be presented before registration takes place	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> Terminate Process Hold Point <i>Contractor</i> ensures that their employees have been tested for drugs before they arrive on <i>site</i> to start the FFD process. Persons with a positive drug test result are not considered for employment by the <i>Contractor</i>. Persons with positive drug tests will not be allowed to register for the FFD process. The <i>Contractor's</i> employees must be in possession of the drug test results when he/she arrives on site to start the FFD process.
Health Assessment		X	Medical examination to be presented before registration takes place	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> Terminate Process Hold Point The <i>Contractor</i> ensures that all his employees complete a health assessment before they arrive on <i>site</i> to start the FFD process. The occupational health services job

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning	Additional Notes
					<p>specification form is required by the occupational health practitioner for the health assessment.</p> <ul style="list-style-type: none"> • Applicants that are not declared fit to do the work specified in the occupational health services job specification form are not allowed to register on the FFD system. • Health assessments are only performed by <i>Employer</i> registered Occupational Health Practitioners. • The health assessment report is not older than 3 months when the <i>Contractor's</i> employee is enrolled on the FFD system. • Persons that are not declared fit to perform the work specified in the occupational health services job specification form are not considered for employment by the <i>Contractor</i>. • The <i>Contractor's</i> employee must be in possession of the medical assessment results and other relevant documentation when he/she arrives on <i>site</i> to start the FFD process.
Work Permit		X	Work permits to be obtained before registration takes place	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> • Terminate Process Hold Point • Non-South African Citizens are required to be in possession of the relevant Work Permit as required by the

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning	Additional Notes
					<p>Immigration Act before access is considered.</p> <ul style="list-style-type: none"> Persons not in possession of a valid work permit is not considered for employment by the Contractor. The Contractor's employee must be in possession of the original work permit when he/she arrives on site to start the FFD process.
Registration on FFD System	X	X		Contractor's own planning	<ul style="list-style-type: none"> Contractor's employees are registered on the Employer's FFD system by a person appointed by the Employer. This could be a Contractor employee, if appointed by the Employer. The Project Manager is responsible to arrange this activity. Registration is only performed if the Contractor's employee is in possession of all the documentation required for registration If the Contractor's employee is in possession of all the required documents, the individual will be registered and issued with a bar coded form.
Training Requirements Form	X	X	Project Manager and Contractor to supply	Contractor's own planning	<ul style="list-style-type: none"> 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. All Employer training sessions includes an

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning	Additional Notes
					<p>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.</p> <ul style="list-style-type: none"> The <i>Project Manager</i> identifies any specific training needs of each individual or group of individuals (based on the planned work scope) and ensures compliance to the training requirements identified for the specific duties before access to Site is considered. The <i>Contractor's</i> employee must be in possession of the training requirements form when he/she arrives on site to start the FFD process.
FFD Bookings	X	X		<i>Contractor's</i> own planning	<ul style="list-style-type: none"> <i>Contractor's</i> employees are booked on the <i>Employer's</i> FFD system by a person appointed by the <i>Employer</i>. This could be a <i>Contractor</i> employee, if appointed by the <i>Employer</i>.
Confined Space Training		X	Training that the <i>Contractor's</i> employee must complete (only if required)	<i>Contractor's</i> own planning	Only if required

Activity Description	Project Manager / Employer	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"> The <i>Contractor</i> ensures that a non-disclosure agreement form is signed by each employee before the person is registered to start the FFD process. These forms are obtainable from the <i>Employer</i> at Koeberg.
Security Permit Application	X	X	<i>Project Manager</i> and <i>Contractor</i> to supply	<i>Contractor's</i> own planning	<ul style="list-style-type: none"> 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. It is important that the form is completed by the <i>Contractor</i> in conjunction with the <i>Project Manager</i>. The form identifies the security areas that the <i>Contractor's</i> employee is required to enter for the execution of the tasks. The <i>Contractor's</i> employees must be in possession of the security permit application when he/she arrives on <i>site</i> to start the FFD process.

4.1.5 Fraudulent Documents

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

4.1.6 False Declarations

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

4.1.7 FFD requirements after registration takes place

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

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning (excludes waiting time during high volume periods)	Additional Notes
Enrolment on FFD System	X	X	<i>Contractor's</i> employees shall be enrolled on the <i>Employer's</i> FFD system by the <i>Employer's</i> Security Group when they arrive on site.	10 min	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.
Drug Test	X	X	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> .	30 min	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.
Criminal History Verification	X	X	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 fingerprints and forwarding to the SAPS for verification.	30 min	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. Non-South African citizens are required to provide proof of their criminal history. The criminal history report from their

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning (excludes waiting time during high volume periods)	Additional Notes
					country's law enforcement agency or INPO (USA citizens only) is dated within three months of their required access date. <i>Contractor</i> employees with a criminal background that is deemed to be a security risk to Koeberg are denied access to the Site
Health Verification	X	X	<i>Contractor</i> employees are required to report to the <i>Employer's</i> Health Services section where the medical examination performed off-site will be verified to ensure that all requirements have been met.	30 min	The duration of this activity is approximately 30 minutes
Induction Training including: <ul style="list-style-type: none"> • SAT • PIT • FME (Generic) • Human Performance 	X	X	Site Access Training (SAT) <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.	8 hours	Site Access Training (SAT) The SAT course is designed for persons working only in the owner-controlled area (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.

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning (excludes waiting time during high volume periods)	Additional Notes
			<p>Plant Induction Training (PIT) <i>Contractor</i> employees who are required to work inside the protected area of KNPS are required to complete the Plant Access Training (PIT) course before work may commence.</p> <p>Foreign Material Exclusion Training (FME) <i>Contractor</i> employees coming to <i>site</i> that require access to FME zones or will perform any hands-on work on the plant are required to complete this training.</p> <p>Human Performance Training (HPT) <i>Contractor</i> employees that are required to work inside the protected area of KNPS shall complete the HPT before work may commence.</p>		<p>Plant Induction Training (PIT) <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</p> <p>Foreign Material Exclusion Training (FME) <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</p> <p>Human Performance Training (HPT) <i>Contractor</i> employees that do not successfully</p>

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning (excludes waiting time during high volume periods)	Additional Notes
					complete the HPT course are not allowed access to Site. <i>Contractor</i> employees required to perform work in the intake basin are required to pass the HPT course.
Induction to Working at Heights / Material Handling	X	X	<i>Contractor</i> employees are required to successfully complete the required Working at Heights/ Material Handling training before working at heights or handling material is considered.	8 hours	Failure to successfully complete the Working at Heights / Material Handling training will result in work at heights or handling material being prohibited
Induction to Confined Space	X	X	<i>Contractor</i> employees are required to successfully complete the required confined space training before access to confined space is considered.	2 hours	Failure to successfully complete the confined space training will result in access to confined space being restricted
Induction to Basic Rigging	X	X	<i>Contractor</i> employees are required to successfully complete the required Rigging training before rigging work is considered.	8 hours	Failure to successfully complete the Rigging training will result in rigging work being prohibited
Training	X	X	<i>Contractor</i> employees are required to work as supervisors must successfully complete the required supervisor training before work is considered.	2.5 days	Failure to successfully complete the training will result individual being prohibited to do supervision
Technical assessment	X	X	<i>Contractor</i> employees who are required to perform work of a technical nature	4 h - 16p	The <i>Contractor</i> is responsible to indicate the work that

ROOF AND CEILING REPAIRS OF THE MAINTENANCE SERVICE BUILDING (MSB) COMPLEX

Activity Description	Project Manager / Employer	Contractor	Requirements	Planning (excludes waiting time during high volume periods)	Additional Notes
<ul style="list-style-type: none"> • Mechanical • Machining • MC&I • Electrical • Welding • Pipe Fitting • Civil TA 4 • I&T • MSS 			inside the protected area of Koeberg are required to perform technical assessments and be authorised to perform the work that they have been assessed for.	12 h - 3p 16 h - 16p 8 h - 4p 4 h - 6p 6 h - 4p 6 h - 4p 8 h - 4p 6 h - 4p	the <i>Contractor's</i> employee will be performing on the Site. <i>Contractor</i> employees that do not successfully complete the technical assessment shall not be allowed to perform work on the Site. The duration of this activity depends on the type of work discipline and scope and is between 4 hours and two days.
Final acceptance and Issuing permit	X	X	All required FFD requirements are completed successfully before final acceptance is processed and a security permit is issued by the Security Group.	30 min	

4.1.8 Medical Exam

Medical examinations are done by *Project Manager* approved external medical practitioners. These are:

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

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

4.1.9 Exit procedure

The *Contractor* ensures that permit holders that no longer require access to the Site follow the FFD exit procedure. Failure to do so will 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.

4.1.10 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 Duynefontein entrance and at Access Control Point 1 (ACP-1). All temporary worker/visitors permits are issued at ACP-1.

4.1.11 Access to radiological areas “Controlled Zones” and reactor building (where applicable)

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

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

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

4.1.12 Prohibited / unauthorised items on site

In terms of the National Key Point Act 102 of 1980, the KNPS 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 (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 Access Training Course (PAT). It is the responsibility of each of the *Contractor's* employees to ensure compliance and to refrain from bringing prohibited/unauthorised items onto *site*.

4.1.13 Vehicles and tools / equipment

All equipment and tools are subject to a security screening before they are allowed on 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 service. Vehicles are only allowed on if justification is provided to the that such a vehicle is essential to Provide the Service.