

NEC3 Term Service Contract (TSC3)

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

and

for Procure and Supply Filter sand for Kendal Power Station Continuous Ash Disposal Facility Projects

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ENQUIRY No. MPKEN10829PS

PART C1: AGREEMENTS & CONTRACT DATA

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Procure and Supply Filter sand for Kendal Power Station Continuous Ash Disposal Facility Projects

C1.1 Form of Offer & Acceptance

Offer

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

Title: Procure and Supply Filter sand for Kendal Power Station Continuous Ash Disposal Facility Projects

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

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

Options A or C	The offered total of the Prices exclusive of VAT is	R
Option E	The first forecast of the total Defined Cost plus the Fee exclusive of VAT is	R
	Sub total	R
	Value Added Tax @ 15% is	R
	The offered total of the amount due inclusive of VAT is1	R
	(in words)	

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

Signature(s)		
Name(s)		
Capacity		
For the tenderer:		
	(Insert name and address of organisation)	
Name & signature of witness		Date
Tenderer's CII	OB registration number:	

PART C1: AGREEMENTS AND CONTRACT DATA

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

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Acceptance

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

The terms of the contract, are contained in:

Part C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part C2 Pricing Data

Part C3 Scope of Work: Service Information

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

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

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

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

Signature(s)			
Name(s)			
Capacity			
for the Employer			
	(Insert name and address of organisation)		
Name & signature of witness		Date	

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

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

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

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

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

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

	For the tenderer:	For the Employer
Signature		
Name		
Capacity		
On behalf of	(Insert name and address of organisation)	(Insert name and address of organisation)
Name & signature of witness		
Date		

C1.2 TSC3 Contract Data

Part one - Data provided by the Employer

- 1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left-hand column for each statement however other clauses may also use the same data.
- 2. Some TSC3 options are always selected by Eskom Holdings SOC Ltd. The remaining TSC3 options are identified by shading in the left-hand column. In the event that the option is not required select and delete the whole row. Where the following symbol is used "[•]" data is required to be inserted relevant to the specific option selected.]

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

Clause	Statement	Data	
1	General		
	The conditions of contract are the core clauses and the clauses for main Option:		
		A:	Priced contract with price list
	dispute resolution Option	W1:	Dispute resolution procedure
	and secondary Options		
		X2	Changes in the law
		X3:	Multiple currencies
		X4:	Parent company guarantee
		X17:	Low service damages
		X18:	Limitation of liability
		Z:	Additional conditions of contract
	of the NEC3 Term Service Contract April 2013 ² (TSC3)		
10.1	The <i>Employer</i> is (name):	2002/0 incorp	m Holdings SOC Ltd (reg no: 015527/30), a state-owned company porated in terms of the company laws of epublic of South Africa
	Address		tered office at Megawatt Park, Maxwell Sandton, Johannesburg

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

	Tel No.	017 612 6719
	Fax No.	
10.1	The Service Manager is (name):	Mzingisi Sakhumzi Ngcongolo
	Address	Kendal Power Station
	Tel	017 749 5025
	Fax	
	e-mail	NgcongSM@eskom.co.za
11.2(2)	The Affected Property is	The works at Kendal Power Station Ash Disposal Facility
11.2(13)	The service is	Procure and Supply Filter sand for Kendal Power Station Continuous Ash Disposal Facility Projects
11.2(14)	The following matters will be included in the Risk Register	Industrial Strikes Inclement Weather Limited Storage Area to Stockpile Sand Limited Space for Parking of Trucks
11.2(15)	The Service Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The law of the contract is the law of	the Republic of South Africa
13.1	The language of this contract is	English
13.3	The period for reply is	Seven Days
2	The <i>Contractor</i> 's main responsibilities	Data required by this section of the core clauses is also provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data
21.1	The Contractor submits a first plan for acceptance within	One weeks of the Contract Date
3	Time	
30.1	The starting date is.	23 October 2023
30.1	The service period is	Four Months
4	Testing and defects	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
5	Payment	
50.1	The assessment interval is	between the 20th day of each successive month.
51.1	The currency of this contract is the	South African Rand

51.2	The period within which payments are made is	Four weeks.
51.4	The interest rate is	the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and
		(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.
6	Compensation events	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
7	Use of Equipment Plant and Materials	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
8	Risks and insurance	
80.1	These are additional <i>Employer</i> 's risks	1. None
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
10	Data for main Option clause	
Α	Priced contract with price list	
20.5	The Contractor prepares forecasts of the final total of the Prices for the whole of the service at intervals no longer than	Four weeks.

11	Data for Option W1	
W1.1	The Adjudicator	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
	Address	
	Tel No.	
	Fax No.	
	e-mail	
W1.2(3)	The Adjudicator nominating body is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (London) (see www.ice-sa.org.za) or its successor body.
W1.4(2)	The tribunal is:	arbitration
W1.4(5)	The arbitration procedure is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - 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.
12	Data for secondary Option clauses	
X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.

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X4	Parent company guarantee	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
X17	Low service damages	
X17.1	The service level table is in	None
X18	Limitation of liability	
X18.1	The Contractor's liability to the Employer for indirect or consequential loss is limited to	R0.0 (zero Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	the amount of the deductibles relevant to the event
X18.3	The Contractor's liability for Defects due to his design of an item of Equipment is limited	The greater of
	to	the total of the Prices at the Contract Date and
		 the amounts excluded and unrecoverable from the Employer's insurance (other than the resulting physical damage to the Employer's property which is not excluded) plus the applicable deductibles
X18.4	The Contractor's total liability to the Employer, for all matters arising under or in connection with this contract, other than	the total of the Prices other than for the additional excluded matters.
	the excluded matters, is limited to	The Contractor's total liability for the additional excluded matters is not limited.
		The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for
		 Defects due to his design, plan and specification, Defects due to manufacture and fabrication
		 outside the Affected Property, loss of or damage to property (other than the <i>Employer</i>'s property, Plant and Materials),
		 death of or injury to a person and infringement of an intellectual property right.
X18.5	The end of liability date is	4 months after the end of the service period.
Z	The additional conditions of contract are	Z1 to Z14 always apply.

Z1 Cession delegation and assignment

Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.

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Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

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

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

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

Z4 Confidentiality

- Z4.1 The Contractor does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the Contractor, enters the public domain or to information which was already in the possession of the Contractor at the time of disclosure (evidenced by written records in existence at that time). Should the Contractor disclose information to Others in terms of clause 25.1, the Contractor ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.
- Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that

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- confidential treatment will be afforded to the information so disclosed.
- Z4.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z4.5 The Contractor ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

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

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

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*:
 - accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Affected Property;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the service; and
 - undertakes, in and about the execution of the service, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the Contractor's direction and control, likewise observe and comply with the foregoing.
- Z6.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

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

- Z7.1 Within one week of receiving a payment certificate from the Service Manager in terms of core clause 51.1, the Contractor provides the Employer with a tax invoice in accordance with the Employer's procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

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Z8 Notifying compensation events

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

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

Z9 Employer's limitation of liability

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

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

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

Z11 Ethics

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

Affected Party	means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i>
	or a third party, such party's employees, agents, or Subcontractors or Subcontractor's

employees, or any one or more of all of these parties' relatives or friends,

Coercive **Action**

means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an

Affected Party to act unlawfully or illegally,

Collusive Action

means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,

Committing **Party**

means, as the context requires, the Contractor, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's

employees,

means the offering, giving, taking, or soliciting, directly or indirectly, of a good or **Corrupt Action**

service to unlawfully or illegally influence the actions of an Affected Party,

Fraudulent Action

means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid

an obligation or incurring an obligation,

Obstructive Action

means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an

investigation into allegations of Prohibited Action, and

Prohibited Action

means any one or more of a Coercive Action, Collusive Action Corrupt Action,

Fraudulent Action or Obstructive Action.

- Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
- Z11.2 The Employer may terminate the Contractor's obligation to Provide the Services if a

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

- Z11.3 If the *Employer* terminates the *Contractor*'s obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Z12 Insurance

Z_12_.1 Replace core clause 83 with the following:

Insurance cover 83

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

INSURANCE TABLE A

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage caused by the Contractor to the Employer's property	The replacement cost where not covered by the <i>Employer</i> 's insurance.
	The <i>Employer</i> 's policy deductible as at Contract Date, where covered by the <i>Employer</i> 's insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the Employer's insurance.
	The <i>Employer</i> 's policy deductible as at Contract Date, where covered by the <i>Employer</i> 's insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the Employer's insurance.
	The <i>Employer</i> 's policy deductible as at Contract Date, where covered by the <i>Employer</i> 's insurance.
The Contractor's liability for	Loss of or damage to property
loss of or damage to property (except the <i>Employer</i> 's property, Plant and Materials	The replacement cost
and Equipment) and liability for	Bodily injury to or death of a person
bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in	The amount required by the applicable law.

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connection with the Contractor's Providing the Service	
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

Z_12.2 Replace core clause 86 with the following:

Insurance by the *Employer*

86

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

INSURANCE TABLE B

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

Z13 Nuclear Liability

- Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.
- Z13.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from

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nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

- Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z14 Asbestos

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

AAIA means approved asbestos inspection authority.

ACM means asbestos containing materials.

AL means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres

per ml of air measured over a 4 hour period. The value at which proactive actions is

required in order to control asbestos exposure to prevent exceeding the OEL.

Ambient Air means breathable air in area of work with specific reference to breathing zone, which

is defined to be a virtual area within a radius of approximately 30cm from the nose

inlet.

Compliance Monitoring

means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements

for safe processing, handling, storing, disposal and phase-out of asbestos and

asbestos containing material, equipment and articles.

OEL means occupational exposure limit.

Parallel Measurements means measurements performed in parallel, yet separately, to existing measurements

to verify validity of results.

Safe Levels means airborne asbestos exposure levels conforming to the Standard's requirements

for safe processing, handling, storing, disposal and phase-out of asbestos and

asbestos containing material, equipment and articles.

Standard means the *Employer*'s Asbestos Standard 32-303: Requirements for Safe Processing,

Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing

Material, Equipment and Articles.

SANAS means the South African National Accreditation System.

TWA means the average exposure, within a given workplace, to airborne asbestos fibres,

normalised to the baseline of a 4 hour continuous period, also applicable to short term

exposures, i.e. 10-minute TWA.

Z14.1 The Employer ensures that the Ambient Air in the area where the Contractor will Provide the

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Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

- Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor*'s expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Contractor*'s personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer*'s expense, and conducted in line with South African legislation.

C1.2 Contract Data

Part two - Data provided by the Contractor

[Instructions to the contract compiler: (delete this notes before issue to tenderers with an enquiry) Whenever a cell is shaded in the left-hand column it denotes this data is optional and would be required in relation to the option selected. In the event that the option is not required select and delete the whole row.]

Notes to a tendering contractor:

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

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

Clause	State	ment	Data	
10.1	The C	ontractor is (Name):		
	Addres	SS		
	Tel No).		
	Fax No	0.		
11.2(8)	The di	rect fee percentage is	%	
	The su	ubcontracted fee percentage is	%	
11.2(14)		llowing matters will be included in sk Register		
11.2(15)		ervice Information for the actor's plan is in:		
21.1	The place	an identified in the Contract Data is ned in:		
24.1	The ke	ey people are:		
	1	Name:		
		Job:		
		Responsibilities:		
		Qualifications:		
		Experience:		
	2	Name:		
		Job		

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

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Responsibilities:
Qualifications:

Experience:

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

Α	Priced contract with price list
11.2(12)	The price list is in
11.2(19)	The tendered total of the Prices is R
С	Target contract with price list
11.2(12)	The price list is in
11.2(20)	The tendered total of the Prices is R
E	Cost reimbursable contract
11.2(12)	The price list is in

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C1.3 Forms of Securities

Pro formas for Bonds & Guarantees

For use with the NEC3 Term Service Contract (TSC3)

The conditions of contract stated in the Contract Data Part 1 include the following Secondary Options:

Option X4: Parent company guarantee

Each of these secondary Options requires a bond or guarantee "in the form set out in the Service Information". Pro forma documents for these bonds and guarantees are provided here for convenience but are to be treated as part of the Service Information.

The *Contractor* shall guarantee his ASGI-SA Obligations by providing the *Employer* with an ASGI-SA Guarantee in the form provided here.

The organisation providing the bond / guarantee does so by copying the pro forma document onto his letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract.

Pro forma Parent Company Guarantee (for use with Option X4)

(to be reproduced exactly as shown below on the letterhead of the Contractor's Parent Company)

Eskom Holdings SOC Ltd Megawatt Park Maxwell Drive	
Sandton Johannesburg	Date:
Dear Sirs,	
Parent Company Guarantee for Contract No	
With reference to the above numbered contract made or to be made between	
Eskom Holdings SOC Ltd	(the <i>Employer</i>) and
{Insert registered name and address of the Contractor}	(the Contractor), for
{Insert details of the works from the Contract Data}	(the works).
I/We the undersigned	
on behalf of the <i>Contractor</i> 's parent company	
of physical address	

and duly authorised thereto do hereby unconditionally guarantee to the *Employer* that the *Contractor* shall Provide the Service in accordance with the above numbered Contract.

- 1. If for any reason the *Contractor* fails to Provide the Service, we hereby agree to cause to Provide the Service at no additional cost to the *Employer*.
- 2. If we fail to comply with the terms of this Deed of Guarantee, the *Employer* may itself procure such performance (whether or not the Agreement be formally determined). The *Employer* is to notify us and we shall indemnify the *Employer* for any additional cost or expense it incurs.
- 3. Our liability shall be as primary obligor and not merely as surety and shall not be impaired or discharged by reason of any arrangement or change in relationship made between the *Contractor* and the *Employer* and/or between us and *Contractor*, nor any alteration in the obligations undertaken by the *Contractor* or in the terms of the Agreement; nor any indulgence, failure, delay by you as to any matter; nor any dissolution or liquidation or such other analogous event of the *Contractor*.
- 4. The *Employer* shall not be obliged before taking steps to enforce the terms of this Deed of Guarantee to obtain judgement against the *Contractor* in any court or other tribunal, to make or file any claim in liquidation (or analogous proceedings) or to seek any remedy or proceed first against the *Contractor*.
- 5. This Deed of Guarantee shall be governed by and construed in accordance with the laws of the Republic of South Africa and we hereby submit to the non-exclusive jurisdiction of the High Court of South Africa.

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Signed at	on this	day of	200_
Signature(s)			
Name(s) (printed)			
Position in parent company			
Signature of Witness(s)			
Name(s) (printed)			

Pro forma Performance Bond – Demand Guarantee (for use with Option X13) (to be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee)

Megav	vatt Parl ell Drive	gs SOC Ltd	Reference No.	[•] [Drafting Note: Bank reference number to be inserted]
	nesburg		Date:	
Dear S	Sirs			
Perfor	mance B	ond - Demand Guarantee: [Dra	ofting Note: Name of Contractor to be	inserted]
Projec	t[] Con	ract Reference: [Drafting N	ote: Contractor contract reference nu	mber to be inserted]
1.	In this	Guarantee the following words ar	nd expressions shall have the following	ng meanings:-
1.1		"Bank" – means of Bank to be inserted]	, Branch, (Registration No.); [Drafting Note: Name
1.2		"Bank's Address" – means [Drafting Note: Bank's physical	address to be inserted]	;
1.3		Eskom and the Contractor, on o	n agreement relating to the Services or about the day of 200[•] (Conovated or substituted from time ference number to be inserted]	ontract Reference No. [.]
1.4			mpany registered in accordance wit ng Note: Name and details of Contra	
1.5			ngs SOC Ltd, a company registered frica under Registration Number 2002	
1.6		"Expiry Date" - means the earlie	er of	
	•	Contractor as certified in terms	s a notice from Eskom stating that a of the contract have been received oligations under the Contract, or	
	•	the date that the Bank issues a be required by Eskom	replacement Bond for such lesser o	r higher amount as may
1.7		"Guaranteed Sum" - means the	sum of R	Rand);
1.8		"Services" - means [insert as ap	pplicable.].	
2.	thereto proper Contra	, confirm that we hold the Gua performance by the Contractor ct and hereby undertake to pay	the undersigned a fixed and of the Ba ranteed Sum at the disposal of Esk of all of its obligations in terms of to Eskom, on written demand from exceeding in total the Guaranteed Sun	om, as security for the of and arising from the Eskom received prior to
3.	A dem shall:	and for payment under this gua	rantee shall be made in writing at t	he Bank's address and
3.1		be signed on behalf of Eskom	by a Group Executive, Divisional Ex	ecutive, Senior General

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Ü	at Date I behalf of the Bank
9.	The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.
8.6	Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
8.5	shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.
8.4	shall be regarded as a liquid document for the purpose of obtaining a court order; and
8.3	shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
8.2	is, save as provided for in 7 above, personal to Eskom and is neither negotiable nor transferable;
8.1	shall expire on the Expiry Date until which time it is irrevocable;
8.	This Guarantee:
7.	Should Eskom cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then Eskom shall be entitled to cede to such third party the rights of Eskom under this Guarantee on written notification to the Bank of such cession.
6.	Eskom shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.
5.2	shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed, by the fact that a dispute may exist between Eskom and the Contractor.
5.1	shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
5.	The Bank's obligations in terms of this Guarantee:
4.2	is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
4.1	is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
4.	Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank's obligation/s to make payment:
3.3	state that the Demand Amount is payable to Eskom in the circumstances contemplated in the Contract.
3.2	state the amount claimed ("the Demand Amount');
	Manager or its delegate;

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Bank Signatory:	Bank Signatory:
Witness:	Witness:
Bank's seal or stamp	

Pro forma ASGI-SA Guarantee

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee)

Eskom Holdings SOC Ltd Megawatt Park Maxwell Drive Sandton Johannesburg Reference No [•] [Drafting Note:

Bank reference

number to be inserted]

Date:

Dear Sirs

Pro-Forma ASGI-SA Guarantee: [Drafting Note: Name of Contractor to be inserted]

Project [] Contract Reference: [•] [Drafting Note: Contractor contract reference number to be inserted]

10. In this Guarantee the following words and expressions shall have the following meanings:-

- 1.1 "Bank" means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]
- 1.2 "Bank's Address" means [•]; [Drafting Note: Bank's physical address to be inserted]
- 1.3 "Contract" means the written agreement relating to the Project, entered into between the *Employer* and the *Contractor*, on or about the [●] day of [●] 200[●] (Contract Reference No. [●] as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted]
- 1.4 "Contractor" means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]
- 1.5 "Contractor's ASGI-SA Obligations" means the Contractor's ASGI-SA Obligations under and as defined in the Contract.
- 1.6 "Employer" means Eskom Holdings SOC Ltd, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30.
- 1.7 "Expiry Date" means the [●] day of [●] 200[●]; [Drafting Note: anticipated date of issue of ASGI-SA Performance Certificate to be inserted.]
- 1.8 "Guaranteed Sum" means the sum of R [●] ([●] Rand);

1.9	"Projec	ct" – means	the					
-----	---------	-------------	-----	--	--	--	--	--

- 2. At the instance of the *Contractor*, we the undersigned _____ and _____, in our respective capacities as _____ and ____ of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of the *Employer*, as security for the proper performance by the *Contractor* of the *Contractor's* ASGI-SA Obligations and hereby undertake to pay to the *Employer*, on written demand from the *Employer* received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.
- 3. A demand for payment under this guarantee shall be made in writing at the Bank's address and shall:
 - 3.1 state the amount claimed ("the Demand Amount");
 - 3.2 state that the Demand Amount is payable to the *Employer* in the circumstances contemplated in the Contract.

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4. Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank's obligation/s to make payment:

- 4.1 is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
- 4.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
- 5. The Bank's obligations in terms of this Guarantee:
 - 5.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
 - 5.2 shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed, by the fact that a dispute may exist between the *Employer* and the *Contractor*.
- 6. The *Employer* shall be entitled to arrange its affairs with the *Contractor* in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the *Contractor* or any variation under or to the Contract.
- 7. Should the *Employer* cede its rights against the *Contractor* to a third party where such cession is permitted under the Contract, then the *Employer* shall be entitled to cede to such third party the rights of the *Employer* under this Guarantee on written notification to the Bank of such cession.
- 8. This Guarantee:
 - 8.1 shall expire on the Expiry Date until which time it is irrevocable;
 - 8.2 is, save as provided for in **7** above, personal to the *Employer* and is neither negotiable nor transferable;
 - 8.3 shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
 - 8.4 shall be regarded as a liquid document for the purpose of obtaining a court order; and
 - 8.5 shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the courts of the Republic of South Africa.
 - 8.6 Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
- 9. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at	Date
For and behalf of the Bank	
Bank Signatory:	Bank Signatory:
Witness:	Witness:
Bank's seal or stamp	

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PART 2: PRICING DATA

TSC3 Option A

Document reference	Title	No of pages
C	Pricing assumptions: Option A	2
C	2.2 The price list	1

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

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

Identified and defined terms

- 11 11.2
- (12) The Price List is the *price list* unless later changed in accordance with this contract.
- (17) The Price for Services Provided to Date is the total of
- the Price for each lump sum item in the Price List which the Contractor has completed and
- where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.
- (19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

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

Function of the Price List

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

Link to the Contractor's plan

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

Preparing the price list

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

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

- Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A:
- Understands the function of the Price List and how work is priced and paid for;
- Is aware of the need to link operations shown in his plan to items shown in the Price List;
- Has listed and priced items in the price list which are inclusive of everything necessary and

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incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;

- Has priced work he decides not to show as a separate item within the Prices or rates of other listed items in order to fulfil the obligation to complete the service for the tendered total of the Prices.
- Understands there is no adjustment to items priced as lump sums if the amount, or quantity, of
 work within that item later turns out to be different to that which the *Contractor* estimated at time of
 tender. The only basis for a change to the (lump sum) Prices is as a result of a compensation
 event.

Format of the price list

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

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

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

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

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

C2.2 the price list

Item nr	Description	Unit	Expected Quantity	Rate	Price
1	Supply and delivery of Filter Sand to Kendal Power Station (Wet rate and Driver included)	tons	114000		
2	Testing of material	no.	50		
3	Flag personnel to direct trucks for the duration of the contract	no.	4		
4	Tally personnel for duration of the contract	no.	2		
5	Establishment of an Excavator/Front End Loader to load crusher sand	sum	1		
6	Excavator/Front End Loader to load crusher sand	months	1		
	Preliminaries and	d Generals	3		
8	Site Establishment (Site Offices, Eating Area and Ablutions)	Item	1		
9	SHEQ	Sum	1		
10	Management and Supervision	monthly	4		
11	Accommodation	monthly	4		
12	Transportation	monthly	4		
13	De - Establishment	Item	1		

The total of the Prices	
-------------------------	--

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PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	Employer's Service Information	26
C3.2	Contractor's Service Information	
	Total number of pages	

PART C3: SCOPE OF WORK PAGE 33

C3.1: EMPLOYER'S SERVICE INFORMATION

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1. Description of the service

1.1 Executive overview

This scope of work aims to provide a high-level summary of the scope of work outlining the activities which are required for a Service Provider to, procure, and supply filtered sand at the Contractor's lay-down area.

The following is a summary of the scope of work:

- The supplier will be required to procure filtered sand as per specified grading envelope and deliver it to Kendal Power Station Ash Disposal Facility in required quantities.
- Quality control checks will be performed on each 1500 tons to ensure compliance to the envelope requirements.
- The total quantity of ash to be procured and transported is 114 000 tons for the contract duration.
- The procured filtered sand must then be trucked from the supplier to the Contractor's laydown area where it should be stockpiled for placement on the geomembrane in the Ash Disposal Facility (ADF) Phase 2 and Phase 3.
- The supplier will be required to preserve the transported material until is placed on the liner by the other contractor.
- The above activities must be done in an environmentally friendly manner and comply with Legislative requirements.
- The Service provider will be required to deliver 2250 tons per day for the duration of five months.
- The transportation of material will be from Monday to Saturday.

1.2 Employer's requirements for the service

1.2.1 BACKGROUND

Kendal Power Station (Kendal) is a 4 116 MW installed capacity base load coal fired power station, consisting of 6 units. Eskom commenced construction of Kendal in 1982, which was completed in 1993. The ash disposal facility is approximately 2km south-west of the Kendal Power Station terrace, and to the west of the R686.

Ash is generated as a by-product due to the combustion of coal from the power station. As a result of this process Kendal produces about 5.5 million tons of ash per annum. The ash is transported from the boilers to the dry ash dump by means of dual overland conveyors. The ash dump is constructed by the main stacker and standby spreader in a progressive nature by placing a front stack of ash in front of the conveyors down to ground level and a 12m backs tack behind. This ash is currently being disposed of within the premises of the Kendal Power Station, on Eskom owned land in terms of the current power station Water Use Licence.

The original design of the ash dump was done by Jones & Wagener consulting civil engineers in the mid 1980's. The ash dump was designed for a 40-year station life, plus an 8 year contingency area, by diverting the western clean water stream into the next valley and ashing over the western stream valley. As only 60% of the land for the ash dump was purchased at the start of the power station, Kendal did not secure its ashing rights for the total design life and uncontrolled private surface coal mining took place on the remaining area. This resulted in the original ash dump design no longer being feasible to construct as the required western clean water stream diversion

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dam could no longer be built on the disturbed coal mine area. The remaining properties required for the ash dump construction were purchased in 2008.

Due to this situation, the footprint of the ash dump was constrained within the original design footprint on the current dump site, to the area between the northern and western clean water streams, which resulted in a loss of about 20% of the original design area. This loss of dump capacity, together with a higher ash volume due to poorer quality coal, higher generating loads and a lower ash dump density than assumed in the original design, together with the recent increase in the required station life to 60 years, resulted in the current ash dump site not being able to provide ashing capacity for Kendal's remaining life.

1.2.2 PROJECT OVERVIEW

Due to the need to obtain an Integrated Environmental Authorisation (including Waste) and a Water Use Licences (WUL) for the ashing operations for the remaining area of the continuous ash dump on the new properties and the new 30 year ash disposal facility, The *Employer* appointed the Designer to carry out an EIA study to assess the environmental risks and determine the optimum dump construction and required mitigation works, in order to provide continuous ashing capability for Kendal's 60 year life. The Integrated Environmental Authorization (IEA) was issued on 28 July 2015 for a period of 5 years and WUL was issued on 18 December 2015.

Current environmental legislations require that the construction and operation of an ash disposal facility, must comply with all relevant environmental legislation such as the National Environmental Management Act, Act No. 107 of 1998, National Environmental Management Waste Act, Act No. 59 of 2008 and the National Water Act, Act No. 36 of 1998. Therefore, the ash disposal facility was required to obtain the Environmental Authorisation, Waste Management Licence and the Water use Licence in order to comply with environmental legislation.

The Kendal ADF is currently an unlined dry stack ash dump. The ADF is designed to have one unlined phase and four lined phases as mentioned in the ADF phasing and development section. Ash reporting to the Kendal ADF is classified as a Type 3 waste which requires a Class C landfill barrier.

The design, as prescribed by the Norms and Standards, referenced above, considers the specific conditions for the site and waste body and the availability of material. Therefore, stemming from the foregoing, the following barrier design is proposed (from top to bottom):

As part of the conditions of environmental approval, the detailed design drawings for the Class C liner were completed with input from the Department of Human Settlements, Water and Sanitation. DWS have approved the design drawings for the Class C performance liner, with the additional requirement for a 150mm layer of filtered sand to be placed between the geomembrane and 150mm of course ash. Eskm deems the sand material as part of the liner system and construction method statement of placement of the material is essential for the longevity of the liner.

1.2.3 Proposed barrier design

- Ash waste body
- Drainage layer of filtered sand
- Leachate collection finger drains consisting of the following:
- Graded washed filter sand
- Graded washed pea gravel
- Graded washed stone:

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- Holed HDPE pipes
- 1.5mm HDPE single textured geomembrane; and
- 300mm thick low permeable subgrade layer with a maximum permeability of 1x10-6 cm/s.

In discussions with Kendal PS operations team and Eskom GTE (Civil), it was concluded that sand can be sourced from other suppliers and used as a drainage/protection layer across the footprint of the ADF, this should greatly reduce the capital expenditure for each phase.

The filtered sand layer shall be placed and spread over the liner in a 150mm layer and care should be taken to avoid damaging the liner during the process. It should be noted that sand can only be placed on the geomembrane during the coolest parts of the day, when the geomembrane core temperature is less than 45°C. This is done to reduce the entrapment of wrinkles under the layer of sand and to keep the strain in the geomembrane below 3%.

A decision was taken during the detailed design phase to truck filtered sand from the closest supplier to the Contractor's lay-down area.

Hence Kendal Power Station should undertake actions that will enable it to comply with the latest legislations.

1.3 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
OBL	Outside battery limits
ADF	Ash Disposal Facility
DEFF	Department of Environmental
DHSWS	Department of Human Settlements, Water and Sanitation
EDWL	Engineering Design Work Lead
EIA	Environmental Impact Assessment
IEA	Integrated Environmental Authorisation
HAZOP	Hazard and Operability Study
MW	Megawatt
N/A	Not Applicable
PEM	Project Engineering Manager
SME	Subject Matter Expert
WUL	Water Use Licence
WULA	Water Use Licence Application

2 Management strategy and start up.

2.1 Management meetings

Meetings will be held between the *Services Manager* and the *Contractor* (and any other co-opted members). The *Contractor* is represented at each meeting by appropriate members of its staff.

The venue for these meetings is determined by the Services Manager. The Services Manager writes the minutes of meetings.

Any action of the Services Manager, Supervisor, Contractor and Adjudicator implied in the minutes of meetings with contractual implications is confirmed by a separate communication given in accordance with this Works Information.

The *Contractor* reports the overall progress and as a minimum requirement, the following is addressed:

- i. Contractor's current activity progress and planned finish dates
- ii. Contractors to report on all items listed in the NEC core clause, 31
- iii. Contractor's and Services Manager's programme agenda compared for problematic differences
- iv. Current and projected manpower by class
- v. Health, safety and quality Management
- vi. The progress of any other relevant activities
- vii. To discuss any technical or commercial issues
- viii. Problem areas or concerns

Regular meetings may be convened and chaired by the Services Manager as follows:

Table 3 - Meetings Schedule

Title and Purpose	Approximate Time & Interval	Location	Attendance by
Risk register and compensation events	Weekly	Venue determined by the Services Manager	Relevant appointed members of a Risk or and Compensation event committee
Overall contract progress and feedback (from contract date to execution commencement)	Weekly	Venue determined by the Services Manager	Employer, Contractor, Supervisor, and Others as determined by the Services Manager
Planning Meetings (Including integration meetings with Others)	Weekly	Venue determined by the Services Manager	Employer, Contractor, Supervisor, Planners and Others as determined by the Services Manager
Safety Meetings	Fortnightly	Venue determined by the Services Manager	Employer, Contractor, Supervisor, SHE Officers and Others as determined by the Services Manager

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Title and Purpose	Approximate Time & Interval	Location	Attendance by
Contractor's SHE Meetings	Monthly	Venue determined by the Services Manager	Employer, Contractor, Supervisor, SHE Officers and Others as determined by the Services Manager
Payment Assessment Meeting	Monthly	Venue determined by the Services Manager	Employer, Contractor, Supervisor, Quantity Surveyor and Others as determined by the Services Manager
Quality and Engineering Meeting	Monthly	Venue determined by the Services Manager	Employer, Contractor, Supervisor, Quality Officers and Others as determined by the Services Manager

All meetings are recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the conditions of contract to carry out such actions or instructions. People attending meetings must have authority to make decisions and execute the decision.

2.2 Contractor's management, supervision, and key people

The *Contractor* will provide the Employer and the Services Manager with an organogram showing the key people and the roles and responsibilities.

The organogram provided must show clear reporting lines between individuals, including individuals from Subcontractors or joint ventures.

The *Contractor* provides the following key personnel as a minimum:

- a) Dedicated Project Manager
- b) Dedicated Supervisor
- c) Dedicated Site Safety Officer
- d) Dedicated Site Environmental Officer
- e) Flagman Personnel x4
- f) Tallyman x2
- i) Quality officer

2.3 Provision of bonds and guarantees

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

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

2.4 Documentation control

All documents and records must be managed according to Technical Document and Record Management Work Instruction (240-76992014), Reporting and Data Requirements Specification

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for Contractors

(240-83561037) and all other Engineering standards referenced in this Works Information. The *Employer* ensures that the *Contractor* is provided with latest revisions. Any uncertainty regarding all specified documents should be clarified with the *Employer* and clarification updates should be reflected in clarification meeting minutes. The language of all documentation shall be in English.

2.5 Invoicing and payment

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

The Contractor shall address the tax invoice to Kendal Power station and include on each invoice the following information:

The words "TAX INVOICE" at the top of the invoice

Name and address of the Contractor and the Service Manager.

Name and address of the Employer

The contract number and title;

The purchase order number

Invoice date

Invoice number

Contractor's VAT registration number;

The *Employer's* VAT registration number 4740101508;

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

Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;

Banking details as per Eskom's vendor database

The Contractor shall send the invoices for payment to: InvoicesgrpcapitalOTH@eskom.co.za and copy the following Finance personnel: HlongwKh@eskom.co.za, SibisiSI@eskom.co.za, DavidsGPN@eskom.co.za

2.6 Contract change management

There are no additional requirements to the compensation event clauses in Section 6 of the core clauses.

2.7 Records of Defined Cost to be kept by the Contractor

None

2.8 Insurance provided by the Employer

There are no additional requirements to the risk and insurance clause in Section 8 of the core clauses.

2.9 Training workshops and technology transfer

None

2.10 Design and supply of Equipment

None

2.11 Things provided at the end of the service period for the Employer's use

2.11.1 Equipment

None

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2.11.2 Information and other things

None

2.12 Management of work done by Task Order

None

3 Health and safety, the environment and quality assurance

3.1 Health and safety risk management

3.1.1 General

In carrying out its obligations to the *Employer* in terms of this contract, which obligations include, amongst others, providing the *works*; using Plant, Materials and Equipment; and whilst at the site for any reason, the *Contractor* is the "Employer" in terms of the Occupational Health and Safety Act, No. 85 of 1993, in respect of its activities and in relation to its employees, agents, Subcontractor/s and mandatories.

The *Contractor* does not consider itself under the supervision or management of the *Employer* with regard to compliance with the Safety Health and Environmental requirements.

Furthermore, the *Contractor* does not consider himself to be a subordinate or under the supervision of the *Services Manager* in respect of these matters. The *Contractor* is responsible for the supervision of its employees, agents, Subcontractors and mandatories and takes full responsibility and accountability for ensuring that they are competent, aware of the Safety Health and Environmental requirements, whilst executing the *works* in accordance with the Safety Health and Environmental requirements.

The *Contractor* ensures compliance with, amongst others:

The provisions of the Occupational Health and Safety Act, No. 85 of 1993 and all applicable regulations (as amended), binding in terms thereof.

- a) The latest versions of standards, procedures, specifications, rules, systems of work and requirements of the *Employer*, copies of which will be provided to the *Contractor* on request. Refer to Section **Error! Reference source not found.**.
- b) The Health, Safety and Environmental Plan inclusive of a Traffic Management Plan prepared by the *Contractor* in accordance with the Employer's Safety Health and Environmental Specification; Kendal Refurbishment and Construction Project - High Frequency Power Supply Project; 240-141641403 and requirements
- c) The *Contractor* shall prepare an environmental management plan and method statements relating to the activities that will be carried out.
- d) The provisions of the National Environmental Management Act (as amended) and all regulations in force from time to time in terms of that Act.

The documentation referred to in paragraphs 2.3.1 (4) is collectively referred to as the Safety Health and Environmental requirements and forms a part of the contract *Works Information*.

The *Contractor* ensures that its employees, agents, Subcontractors and mandatories comply with the provisions of the Occupational Health and Safety Act, No. 85 of 1993, and all applicable regulations binding in terms thereof as well as the *Employer's* Safety Health and Environmental

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Specification whilst making use of plant, materials and equipment and whilst at the Site for any reason whatsoever.

The *Contractor* implements a comprehensive health, safety and environmental management system, based on the OHSAS 18001 and ISO 14001 requirements for utilisation at the project.

The *Contractor* appoints a person, qualified and competent in accordance with the safety health and environmental requirements, as the liaison with the *Employer's* Project Safety, Health and Environmental Manager or delegated person for all such matters as pertaining related to safety, health and the environment. The *Contractor* shall ensure that such a person is contactable 24 hours a day and is registered with a registered professional council approved by the Principal Director of the Department of Labour, as per the requirements of the latest Construction Regulations, inclusive of all exemptions and amendments pertaining thereto.

The Contractor hereby indemnifies the Employer and holds the Employer harmless in respect of any and all loss, costs, claims, demands, liabilities, damage, penalties or expenses that may be made against the Employer and/or suffered or incurred by the Employer (as the case may be) as a result of, any failure of the Contractor, its employees, agents, Subcontractors and mandatories to comply with their obligations, and/or the failure of the Employer to procure the compliance by the Contractor, its employees, agents, Subcontractors and/or mandatories with their responsibilities and/or obligations in terms of or arising from the Occupational Health and Safety Act, No. 85 of 1993.

3.1.2 Mandatory Agreements

The Contractor confirms that:

In terms of sections 37(1) and 37(2) of the OHSA, the *Employer* is relieved of any and all of its responsibilities and liabilities pertaining to the activities performed by the *Contractor* (and its employees, agents, Subcontractors and mandatories) relating to the *works*; the use of plant, materials and equipment; and whilst at the Site for whatsoever reason.

The *Contractor* confirms that, in terms of the Construction Regulations, regulation 6, it is hereby mandated as the designer and must perform all duties required of a designer.

The *Contractor* confirms that he has been provided with sufficient information regarding the health, safety and environmental arrangements applicable to the *works*; the use of Plant, Materials and Equipment, as well as at the Site.

In addition, the *Contractor* ensures that:

Prior to the *Contractor* commencing with any operations/ activities relating to the *works* and/or prior to gaining access to the Site, the *Contractor* concludes a written mandatory agreement with the *Employer* in terms of section 37(2) of the OHSA and 5(1)(k) under the construction regulations. The aforementioned agreement constitutes a record of the written arrangements and procedures between the *Contractor* and *Employer* regarding health and safety.

As far as is reasonably practicable, the safety and absence of risks to health in connection with the production, processing, use, handling, storage or transport of articles or substances is maintained;

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As far as is reasonably practicable, all hazards pertaining to the health and safety of persons and harm to the environment that are attached to any work which is performed, any article or substance which is produced, processed, used, handled, stored or transported and any plant or machinery which is used in its business, is clearly identified and, as far as is reasonably practicable, further establishes what precautionary measures should be taken with respect to such work, article, substance, plant or machinery in order to protect the health and safety of persons and or harm to the environment, and provides the necessary means to apply such precautionary measures;

Such information, instructions, training and supervision as may be necessary to ensure, as far as is reasonably practicable, the health and safety at work of its employees, agents, Subcontractors and mandatories is provided.

As far as is reasonably practicable, no employee, agent, Subcontractor or mandatory performs any work or produces, processes, uses, handles, stores or transports any article or substance or operates any plant or machinery, unless the precautionary measures contemplated in paragraph 2.3.3, or any other precautionary measures which may be prescribed have been taken.

Such measures as may be necessary in the interest of health and safety and the environment are enforced.

Work is performed and that plant, materials or equipment is used under the direct supervision of a person trained to understand the hazards associated with it and who has the authority to ensure that precautionary measures required by the *Employer* are implemented; and

All employees are informed of the scope of their authority as contemplated in OHSA.

Health and Safety Obligations

3.1.3 In addition to the mandatory agreements, the Contractor:

Ensures that all statutory appointments (as required in terms of the Occupational Health and Safety Act, No. 85 of 1993 and all applicable regulations binding in terms thereof, as amended) and other appointments required in terms of the *Employer's* Safety Health and Environmental Specification, are in place and that all appointees are cognisant of their duties and responsibilities in terms of such appointments.

Ensures that such appointees execute their duties and responsibilities as required by such an appointment.

Ensures that all personnel brought by itself onto site (including employees of Contractors and Subcontractors) are suitably qualified and trained for the performance of the task, duties and functions, which will be allocated to them.

Immediately reports any occupational or other injuries, near miss events, property damage, environmental related incidents as well as any potential threat to the health and safety of individuals at the *works* or on the site, as soon as he becomes aware thereof, to the *Services Manager*.

Complies with the *Employer's* Environmental, Occupational Health & Safety Incident Management Procedure - 32-95, relating to the reporting and investigation of incidents. The classification of incidents contained in such document are considered final and must be applied by the *Contractor*

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relating to any incidents/ injuries relating to its employees, agents, Contractors, Subcontractors and mandatories whilst on Site:

Conducts a risk assessment regarding the utilisation of PPE and thereafter ensure that PPE of good quality is issued (at its own cost) to its employees, agents, Contractors, Subcontractors and mandatories prior to such individuals accessing the site, alternatively performing activities related to the *works* at the site, as specified in the *Employer's* PPE Specification.

3.1.4 Radiographic Examinations

If radiographic tests are carried out in the plant, the danger area must be evacuated with the exception only of authorised radiographic workers, and thereafter barricaded. Compliance is according to Regulatory and the *Employer*'s Safety Health and Environmental Specification.

The relevant warning signs at the lockout gates are bolt secured and not by wire or any other means, which could be removed while radiographic tests are in progress. The area is barricaded, and access is restricted until the radiographic process is complete. The radiographic technicians ensure that all the lockout gates are opened on completion of the tests.

When radioactive sources (density tests) are brought onto site, the *Contractor* needs to inform the Client Agent/Manager in advance so that the Responsible Protective Officer (RPO) is informed. The *Contractor* must comply with all the said regulations before access is allowed onto the site.

If radioactive sources need to be stored at the site, approval must be obtained from the RPO. A proper storage area will be identified by the RPO and the *Contractor* will ensure that all necessary warning signs are erected. Radiation awareness will also be conducted for all employees.

3.1.5 Fire Protection

The *Contractor* complies with the requirements of the *Employer's* Safety Health and Environmental Specification, pertaining to fire protection. The *Contractor* ensures that adequate firefighting apparatus is provided at all *Contractors'* work sites, and that *Contractors'* employees are trained in the use of this apparatus.

Precautions are taken to prevent any occurrence of fires or explosions while carrying out any work near flammable gas and liquid systems.

Any tampering with the *Employer's* Fire Equipment is strictly forbidden. All exit doors, fire escape routes, walkways, stairways and stair landings are kept free of obstruction, and may not be used for work or storage at any time. Firefighting equipment remains accessible at all times.

3.2 Environmental constraints and management

The Contractor provides an Environmental Management Plan applicable during supply and transportation of the filtered sand. The plan provides a guideline on the environmental management of the handling of the works. All waste will be handled in an environmentally friendly manner. The Contractor conforms to the "polluter pays principle", duty of care and other NEMA principles.

All the Contractor's staff comply with the Employer's environmental requirements in accordance with the project's Integrated Environmental Authorisation (DEA Ref No: 14/12/16/3/3/3/63),

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Amended Environmental Management Programme (Ref No: 240-153243141) and Water Use License (Ref No: 04/B20E/ABCEGI/3888)

The Contractor ensures that all environmental obligations, applicable legislative requirements, Environmental Management Programme (EMPr) and Employer's specific requirements are fulfilled. This includes all National, Provincial, and local environmental legislation and requirements.

The *Contractor* issues Environmental Management Performance and Expenditure Reports to the *Services Manager* on a weekly and monthly basis.

The *Contractor* conducts their environmental management based on the ISO 14001 requirements and implements their environmental management practices accordingly.

The *Contractor* develops and implements as a minimum the following procedures/ method statement:

- Environmental Management Plan
- Site Establishment Procedure
- Site Layout Plan
- Waste Management Procedure
- Spill Management Procedure
- Hazardous Chemical Substances Management and Storage Procedure
- Water Management Procedure
- Clear-and-Grub Procedure
- Environmental Rehabilitation Procedure
- Veld Fire Procedure
- Environmental Training Awareness Procedure
- Emergency Preparedness and Response Plan

All environmental procedures/ method statements, as listed above, are site-specific and submitted to for acceptance by the *Services Manager* before the commencement of construction activities.

3.2.1 Waste Management

All waste management activities, which include procurement of control measures, handling and disposal or processing of all waste forms generated on the *Contractor's* site, are conducted according to Kendal Waste Management Procedure. All costs associated with waste management are the responsibility of the *Contractor*.

3.2.2 Spill Management

The *Contractor*, at his cost, has available spill control measures (spill kits, drip trays, etc.), to the satisfaction of the *Employer*. All hazardous waste generated from a spill are disposed of at a licensed disposal facility, at the cost of the *Contractor*, and safety disposal certificates are kept for record purposes.

3.2.3 Dust and Storm-water Management

The *Contractor* implements dust control measures. The *Contractor* ensures that no ponding of stormwater occurs on the construction site and shall establish good storm-water management in accordance with the *Employer*'s requirements.

3.2.4 Environmental Rehabilitation

The *Contractor* rehabilitates all areas impacted by construction (e.g. Lay-down, roads, site camp and construction site, etc.) at the end of the project. The *Contractor* submits a rehabilitation plan

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and schedule at least 2 weeks before finalisation of the *works* to the *Services Manager* for approval by the *Services Manager*. All rehabilitation costs are the responsibility of the *Contractor*.

3.2.5 Alien Vegetation Control

Not applicable to this Project.

3.3 Quality assurance Requirements

3.3.1 General

The Contractor complies with the Employer's Quality Requirements Standards.

- a) The *Contractor* and all Subcontractors comply with the *Employer's* quality requirements including those listed in the *Employers* specification document, (240-105658000).
- b) Where applicable, section 3.8 of the Specification (240-105658000) shall be applied.

3.3.2 Operational Documents

The *Contractor* submits as a minimum the following documents, as required by the *Services Manager* during the execution of the *works*:

- a) Updated QCP register
- b) Data book index for approval
- c) Data books for the completed works, before commissioning can commence (refer to the data book specification)

3.3.3 Inspections and Tests

All Plant and Materials is comprehensively tested in accordance with the agreed ITP/ QCPs prior to delivery. The *Employer* reserves the right to appoint others to inspect all parts during manufacturing, erection and commissioning and to be present at any of the tests specified. The witnessing of tests by the *Supervisor* or Others, and if the *Supervisor* chooses to waive the witnessing of any tests, it does not relieve the *Contractor* of his responsibilities. The *Employer* reserves the right to witness tests that are required by the *Employer* are carried out by the *Contractor* during manufacturing, hat may have been carried out at the *Contractor*'s premises.

The *Supervisor* inspects parts of the Plant at his discretion during manufacturing stages and before shipment as per the agreed ITP/QCP;

- a) The *Contractor* is responsible for the inspection of all the work that is performed, and the *Supervisor* only verifies that the work is conducted as per the Works Information.
- b) The *Contractor* provides a minimum of five (5) working days' notice for local off-site inspections,
 - 24 hours for local on-site inspection. The notice contains copies of the *Contractor's* inspection reports.

3.3.4 Quality Responsibility

The Contractor's responsibilities include but are not limited to the following:

- a) The Contractor is accountable for the quality of the output and liable for any failures.
- b) On-and-offsite inspections
- c) Weekly and monthly progress reporting on quality performance
- d) The *Contractor* is responsible for defining the level of intervention of QA/QC or inspections in line with the *Employers* requirements.

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e) The *Contractor* is responsible for defining the level of intervention of QA/QC or inspections to be imposed on his Subcontractor, suppliers and sub-suppliers and must ensure that these are in line with the *Employer's* requirements.

The Supervisor is responsible for the following:

- a) Reviews of the quality submissions
- b) Verification intervention points
- c) Reviews the Contractor's ITP/QCP documents (procedures, test results)
- d) Reviews the data book
- e) Issue of Defects Certificate

3.3.5 Non-Conformances and Defects

Where Non-Conformance (NC) notifications are issued, the *Contractor* acknowledges receipt within the period of reply and proposes corrective and preventive actions to the *Supervisor*. The corrective and preventive actions will include the implementation and completion dates. Progress on all NCs notifications issued to the *Contractor* must be reported to the *Supervisor* on weekly basis.

- a) The Contractor's Quality Manager keeps a register of all NC notifications issued
- b) Records of NCs notifications are kept and form part of the data book records.
- c) Deviations from the Contract are treated as a non-conformance.

To ensure reduction of non-conformances, the *Employer* will implement a penalty to the value of R10 000.00 for every NCR issued during the contract period and not closed within stipulated period.

During the contract execution phase, the *Contractor* will be monitored by the *Supervisor* for performance on quality related aspects.

3.3.6 Quality Reporting

The *Contractor* submits a monthly quality report, on the last working day of the month. The report includes but not limited to the following:

- a) Updated QCP
- b) Tests done
- c) Preservation of equipment status/report

3.3.7 Preservation, shipping and transportation

The *Contractor* ensures that all Plant and Materials are preserved in an appropriate manner as described in the product specifications or in the *Employer* preservation, shipping and transportation procedures as applicable. The *Contractor* submits the preservation, shipping and transportation procedures to the *Supervisor* for review and acceptance. The *Supervisor* may choose to witness the packaging, loading and offloading of the products depending on the equipment criticality, this will be indicated in the intervention points on the ITP/QCP.

The *Contractor* also ensures that all storage requirements for Plant and/or Materials are properly implemented to preserve the products against adverse conditions, deterioration, damages, etc. Storage and preservation procedures for the different equipment must be submitted to the *Services Manager* for review and acceptance. The *Services Manager* may request to inspect the stored Plant and Materials at any given point during the storage period of the product.

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The *Contractor* complies with the quality criteria and constraints stated in this Works Information.

4 Procurement

4.1 People

4.1.1 Minimum requirements of people employed

All personnel employed must be South African who reside local to site.

4.2 Subcontracting

4.2.1 Preferred subcontractors

The Contractor makes use of any supplier for sourcing of equipment, tools and material which the Contractor will use to execute works.

2nd and 3rd Tier Companies (Subcontractors) should be submitted to Eskom for vetting and approval (That is, to be evaluated for LBS/BWO/SBE/BYO BPLwD classification in terms of the requirements of 32-1034).

4.2.2 Subcontract documentation, and assessment of subcontract tenders

- a) The Contractor submits the proposed contract data for each subcontracting for acceptance to the Services Manager.
- b) The Contractor prepares s subcontracting document as according to the NEC Contract.
- c) The Contractor must inform the Services Manager when intending to subcontract some of the works from the contract scope.
- d) The Contractor takes note that their Subcontractors Safety Files will be accepted by the Contractor's Safety Manager before it is handed to the GCD SHE practitioner/Officers for verification of compliance before any work commences. Proof of acceptance by the Contractor Safety Manager needs to be in the Safety file when handed over to GCD SHE Practitioners for verification.
- e) The Contractor only employs qualified Subcontractors

4.2.3 Limitations on subcontracting

None.

4.2.4 Attendance on subcontractors

None.

4.3 Plant and Materials

4.3.1 Specifications

The Contractor is required to supply the following plant:

Loader

34-ton side tippers

4.3.2 Correction of defects

None.

4.3.3 Contractor's procurement of Plant and Materials

The functional unit is suitable for handling and removal by providing mechanism for crane hooks and to avoid damage to the functional unit. During transportation packaging is done in such a way that damage is prevented. Components that are transported separately are marked accordingly

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and are easily identifiable. The Contractor supplies the labelling for the Plant that forms part of the works.

4.3.4 Tests and inspections before delivery

None

4.3.5 Plant & Materials provided "free issue" by the Employer

All Plant and Materials are to be provided by the Contractor.

4.3.6 Cataloguing requirements by the *Contractor*

Not Applicable

5 Working on the Affected Property

5.1 Employer's site entry and security control, permits, and site regulations

5.1.1 Access to Site

Access to the site is controlled and it is governed by the terms and conditions lay down by Kendal Power Station security officials. The proposed site will be shown to the *Contractor* during the site meeting or clarification meeting by the *Employer*.

The *Contractor* liaises with the GCD SHE Practitioner/Officers for SHE Induction prior work to commence. During Safety Induction, site access permits with a copy of the medical and a certified ID copy/passport (not older than three months) should be handed to the GCD SHE Practitioner/Officer for approval.

The *Contractor* employees will take the signed site access documents to security reception official in order to finalize their site access.

The Contractor ensures that all its employees carry their site access forms with them all the time.

The Contractor is subjected to alcohol testing on a daily basis.

The *Contractor* submits his application for vehicle permit to the *Services Manager*. The personnel and vehicles entering and leaving the site are subjected to routine searches.

The *Contractor* obtains a "Gate Removal Permit" from the *Services Manager* before materials and equipment can be removed from site. The "Gate Removal permit" gives itemised list of materials and equipment to be removed from site.

The *Contractor* ensures that a tool list is available on the day of arrival and that all tools are captured on the tool list. The tool list will be handed over to the Reception Security official that will stamp the tool list. The tool list will be kept safe and will be used when tools need to be remove from site. This message should be handed over to any Subcontractor that will be working on Kendal Power Station.

5.1.2 Site Regulations

The *Contractor* complies with the Site Regulations as per *Employer*'s Safety Health and Environmental Specification; Kendal Refurbishment and Construction Project - Construction of the High Frequency Power Supply Project: 240-141641403.

Any subject within the authority of the Services Manager may be addressed by a Site Regulation.

Before work starts on Site, a kick-off meeting is held with the *Contractor* and the *Services Manager*, to explain in detail all requirements of the Site Regulations.

The Contractor is issued with a CD with the current Site Regulations at the project kick-off meeting.

5.1.3 Permit to Work System

Not Applicable

5.2 People restrictions on Site; hours of work, conduct and records

Restrictions and hours of work may apply at Kendal Power Station. The *Contractor* keeps records of his people on Site, including those of his Subcontractors which the *Services Manager* or *Supervisor* have access to at any time. These records may be required when assessing compensation events.

5.3 Health and safety facilities on Site

The *Contractor* provides a First Aid service and SHE representative to his employees and Sub-Contractors. In the case where these prove to be inadequate, like in the event of a serious injury, the *Employer's* Medical Centre and facilities will be available. Outside the *Employer's* office hours, the *Employer's* First Aid Services are only available for serious injuries and life-threatening situations. The *Employer* recovers the costs incurred, in the use of the above *Employer's* facilities, from the *Contractor*.

5.4 Environmental controls, fauna & flora, dealing with objects of historical interest As per the following:

- Kendal Waste Management Procedure
- National Environmental Management Act (NEMA, Act No. 107 of 1998)
- National Environmental Management Waste Act (NEMWA, Act No. 59 of 2008)
- National Water Act 36 of 1998
- National Environmental Management: Biodiversity Act 10 of 2004
- National Veld and Forest Fire Act 101 of 1998
- National Environmental Management: Air Quality Act 39 of 2004
- 240-142585644 Environmental Requirements for Contractors and Suppliers Working on Gx Coal Projects Sites
- Environmental Management Plan (EMP)
- Any applicable South African legislation (at national, provincial and municipal level).

5.5 Title to materials from demolition and excavation

As per Clause 73.2 the *Contractor* has no title to materials from excavation and demolition (e. g. copper).

5.6 Cooperating With and Obtaining Acceptance of Others

Other Contractors are working in the same area as the work of this contract. In this regard, the *Contractor* co-ordinates his work with the *Services Manager* to maintain harmonious working conditions on Site.

During the progress of the *works* the *Contractor* provides access to *Others* who also execute work in the same area, on an as and when required basis.

The *Contractor* makes his own assessment of the problems and difficulties which may be encountered for providing access to and interfacing with *Others* (this includes access difficulties experienced during construction or commissioning phase).

5.7 Publicity and Progress Photographs

The taking of photographs at Kendal Power Station including the Project *works* is restricted and subject to the approval by the *Services Manager*.

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For the purpose of the Progress Reporting Requirements, the *Services Manager* may prohibit the taking of such photographs and/or require that all such photographs be taken by an official *Employer* photographer. In the latter event, the *Contractor* is required to make arrangements directly with the photographer for the taking of the photographs required by the *Contractor* for the purpose of the Progress Reporting Requirements.

5.8 Contractor's Equipment

- a) The Contractor provides all Equipment that is required to complete the works.
- b) The *Contractor* shall ensure that all his construction labour and equipment remain within the fenced off allocated construction area.
- c) The Contractor shall ensure that any staff, labour, or equipment moving outside his allocated construction site does not obstruct the normal operation of the ADF or the power station. Any additional access routes required must be coordinated with the Services Manager.
- d) The *Contractor* must keep daily records of his equipment used on Site and the Working Areas (distinguishing between owned and hired Equipment) with access to such daily records available for inspection by the *Services Manager* at all reasonable times.
- e) All Equipment used by the *Contractor* in providing the *Works* shall comply with the General Machinery Regulation 4 of the Occupational Health and Safety Act (Act 85 of 1993).

5.9 Equipment provided by the Employer

No Equipment will be supplied by the *Employer*, however, the *Employer* does reserve the right to negotiate with the *Contractor* that different equipment be used of another origin for whatever purpose that may become apparent at the time.

The *Contractor* supplies all equipment including cranes, scaffolding and other earthmoving equipment for the construction of the *works* and site establishment.

5.9.1

5.10 Site services and facilities

5.10.1 Provided by the Employer

5.10.1.1 Site Yard

Site Yard for the *Contractor* shall conform to the *Employer's* Safety Health and Environmental Specification; Kendal Refurbishment and Construction Project; Construction of the High Frequency Power Supply Project - 240-127760320.

It is required, for the proper co-ordination and execution of the works that the *Contractor* has an office on site for the duration of the contract.

A site will be made available to the *Contractor* for his yard within the Power Station security area. The proposed site will be shown to the *Contractor* during site meeting or clarification meeting. The yard is a raw site of approximately one hectare and will be used by the *Contractor* for the establishment of his offices, workshop and stores.

The Contractor's yard is subject to periodic inspection by the Services Manager/delegated person.

The location of the nearest sewer manhole, power distribution point, portable water connection storm water channel and road access point is indicated by the *Employer*. The *Contractor* is responsible for connection to the closest point of supply.

5.10.1.2 Supply of Electricity

Electricity will be made available for construction purposes free of charge from power points which will be indicated by the Services Manager. The *Contractor* is responsible for the provision of the reticulation system from the point of supply. Both 220 (AC) Volt and 380 (AC) Volt are available on request. All points of supply requested by the *Contractor* are provided in terms of quantity and location at the discretion of the Services Manager.

No guarantees of power supply quality are given and power supply breaks of some duration may occur without warning. Planned outages are also a possibility. The *Contractor* makes arrangements at his own expense to improve continuity and quality of power where necessary for any reason and no claim of any nature relating to power failures is considered.

No connection is made to the permanent installation at Kendal Power Station without the prior acceptance of the Services Manager.

The power supply is managed in accordance with the latest revision of the Eskom safety regulations i.e.:

- a) 32-846, Operating Regulations for High-Voltage Systems
- b) 36-681, Generation Plant Safety Regulations
- c) COC for the site installation is required prior to power being switched on.

5.10.1.3 Lighting

The *Contractor* at his own expense provides temporary local lighting in accordance with the requirements of the OHS Act as amended. The *Services Manager* provides no local lighting. All construction lighting is the responsibility of the *Contractor*.

5.10.1.4 Water

Water will be made available on request free of charge from water points on site. The *Contractor* supplies at his own cost all the necessary connections, fittings, piping work, temporary plumbing and pumps necessary to lead water from the Employer's points of supply to the various points where it is required. The *Contractor* is responsible for maintaining this equipment and for removing it at Completion of the whole of the works.

The Services Manager does not guarantee continuity of supply and the *Contractor* makes his own provision for standby supplies to maintain continuity of work. Claims of any nature relating to discontinuity of water supply are not considered.

5.10.1.5 Roads

Main access roads are surfaced and complete and may be used by the *Contractor* with the necessary care. The Employer maintains the Site roads, described above, to a fair condition. Any costs incurred by the Services Manager from damage caused to underground services, structures, etc. as a result of the *Contractor* not using the prescribed routes is recovered from the *Contractor*.

The *Contractor* provides temporary access points from the prescribed routes and roads to the points where the *Contractor* is required to perform work, having first obtained permission in writing from the Services Manager.

5.10.1.6 Setting-Out Beacons

Not Applicable

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5.10.2 Provided by the Contractor

It is required, for the proper co-ordination and execution of the works that the *Contractor* has an office on Site for the duration of the contract.

The *Contractor* includes in his establishment rates for all further treatment of the yard areas that he considers necessary for his entire operation throughout his period of occupation and under all weather conditions. The *Contractor* also includes for all security fencing, security and access arrangements. The yard will be kept clean and tidy at all times, this will include all workshops and storage areas under the control of the *Contractor*. Maintenance of the yard is the *Contractor*'s responsibility and is for the Services Managers acceptance.

Outfall drainage of all surface run-off drains is constructed by the *Contractor* to the acceptance of the Services Manager to minimise erosion and to effect control of contaminated water. The *Contractor*'s plan for the layout of his yard area are accepted by the Services Manager prior to occupying the yard and the *Contractor* does not occupy any site area other than that allocated to him. The *Contractor*'s plan states fully what measures are taken regarding removal and storage of topsoil, stabilisation of eroded areas and further loss of topsoil.

The *Contractor* complies with the environmental policy given in the Site Regulations. The *Contractor* provides, erects and maintains for his own use adequate size office accommodation and stores together with such drainage, lighting, heating, and hot and cold-water services as may be required. Provision is also made for adequate parking and a turning area adjacent to all the aforesaid structures. The Supervisor prior to commencement of any work on Site accepts all designs and layouts for these provisions.

The *Contractor* dismantles and clears the yard of all such temporary structures and associated foundations and infrastructure at the direction of the Supervisor on Completion of the whole of the works. No such dismantling and clearance work is carried out without prior acceptance from the Supervisor.

The *Contractor* shall make provision for carrying out of all quality control testing required in terms of the works involved.

The *Contractor* shall either provide a laboratory on site or may make use of approved external laboratories and/or laboratories of other Contractors on site subject to the approval of the Supervisor.

Results of permeability testing will only be accepted if carried out by an accredited laboratory.

5.10.2.1 Telecommunications

Neither a network point nor a telephone is available on site. Should the *Contractor* require one, he is to make his own arrangements with relevant authorities. Arrangements may also be made to use the telephones of the station if they are available. Calls from these will be charged for at prevailing GPO rates.

Should the *Contractor* wish to use radio communication equipment on site, he will make his own arrangements with the relevant authorities. In this case, he is requested to liaise with the head of security at the station to ensure that there is no interference with existing channels or equipment.

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5.10.2.2 Sanitary Facilities and Refuse

Where required, the *Contractor* shall provide and maintain adequate and suitable sanitized ablution facilities appropriate to the workforce size and work duration that conforms to the requirements of all applicable legislation. Separate ablution facilities shall be provided for both genders. The *Contractor* is to supply own sanitary facilities at his *contractor*'s yard. A refuge control system will be established by the *Contractor*. The *Contractor* submits all safe disposal certificates and waste manifests *Services Manager*.

5.10.2.3 Equipment/Appliances

Not Applicable

5.10.2.4 5.2.11 Survey control and Setting Out of the works

Not Applicable

5.11 Control of noise, dust, water and waste

The *Contractor* maintains a high standard of cleanliness during the conduct of his activities at Kendal Power Station. This includes areas allocated for storage of materials, site offices etc. to the satisfaction of the *Services Manager*. The *Contractor* keeps these areas clean and free from accumulation of waste materials and refuse regardless of the source.

The *Contractor* ensures during sweeping and dusting, that a minimum amount of dust is liberated into the atmosphere. Cleaning by vacuum cleaners is preferred and the use of compressed air for cleaning is prohibited.

The *Contractor* is responsible for the prompt removal of all waste to a designated disposal area. The disposal area will be on or in the vicinity of the Power Station and be indicated by the *Services Manager*.

For the purpose hereof, "waste" any matter, whether liquid or solid or any combination thereof, which is a by-product, emission, residue or remainder of any process or activity carried out in connection with the *works* and which is not reused on the Site in the in the ordinary course of carrying out the *works* within seven days of production.

The *Contractor* provides an adequate number of marked bins and containers at offices, in yards, at workshops and on the Site for the temporary storage of waste. These bins and containers are subject to approval by the *Services Manager*. The *Contractor* is required to segregate certain items of waste by type as designated by the *Services Manager*.

Bins and containers are emptied and waste removed to the designated area at least once a week. All the waste removed to the designated area at least once a week. All the temporary storage areas for bins and containers are kept tidy and must not constitute a nuisance to others. The *Contractor* takes all required steps to avoid spillage of waste alongside the bins and containers during removal and disposal thereof.

All waste that cannot be contained in either a bin or container is placed on a temporary waste site which the *Services Manager* identifies. The waste is removed as soon as possible but in any event at least once a week. No burning of waste and littering is allowed at the Power Station.

Hazardous waste is dealt with in accordance with the safety, health and/or environmental requirements of the *works* and the *Contractor* is solely responsible for the proper disposal thereof. Hazardous waste will be disposed of at an authorised landfill site. Waste manifest will be kept for

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record keeping and hand over at the end of the Project. The *Contractor* notifies the *Services Manager* of all chemical substances coming to site and keeps an inventory and MSDS of the chemicals.

Controlling water from excavations is done as required by the Environmental legislation and only after a method statement to this regard has been accepted by the *Services Manager*.

The *Contractor* must ensure that adequate pumping capacity is provided for the continual pumping of water from excavations. Water may be contaminated and should not be discharged into the environment unless

5.12 Hook ups to existing works

Not Applicable

5.13 List of drawings

Not Applicable

6. PROGRAMME AND PLANNING

6.1 General

The Contractor submits a single integrated programme that incorporates the programmes of all of his sub-contractors. The interface points between his different sub-contractors as well as the interface points between the individual sub-contractors, Client and the Contractor are to be clearly identified.

6.2 Details of the Employer and other who will be occupying the working areas at the same time

Other Contractors are working in the same area as the work of this contract. In this regard, the Contractor co-ordinates his work with the Project Manager to maintain harmonious working conditions on Site. During the progress of the works the Contractor provides access to Others who also execute work in the same area, on an as and when required basis. The Contractor makes his own assessment of the problems and difficulties which may be encountered for providing access to and interfacing with Others (this includes access difficulties experienced during construction or commissioning or han-over phase).

No extra payment or claim of any kind on account of providing reasonable access is allowed.

6.3 Computerised Planning and reporting

The Project Manager does not intend duplicating the Contractor's programming and planning, however, portions or high-level extractions of the Accepted Programme may be used in the Employer's internal master project programme for control purposes.

The Contractor submits updated computer files on a monthly basis, or at any other time as required by the Contractor or as instructed by the Project Manager.

The updated computer file shows the logic and all filters and layouts used in the programme. MS Project has been adopted by the Employer for all planning, progress monitoring and reporting on the Kendal Power Station Continuous Ash Disposal Extension Facility Project.

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The Contractor obtains this software and applies it for the planning and control of the works in line with the accepted Work Breakdown Structure.

6.4 Additional programme requirements

The Contractor uses the Critical Path Method (CPM) technique for programme and planning.

The programme shows the actual critical path clearly. The preparation of the programme contains a programme basis document. This basis document describes the programme and planning methodology, format, project execution philosophy, resource assumptions, qualifications and any other items that may have a substantive impact on the schedule.

The programme layout takes into account the accepted WBS, reflecting the manner in that the works are to be performed and how control data are summarised, reported and monitored.

The following levels of programme are to be used for this project for dynamic integrated project control:

- Management level programme (Level 1)
- · Project level programme (Level 2)
- · Control level programme (Level 3)
- Discipline speciality programme (Level 4)

The Contractor submits the level 2 programme with the tender documentation.

6.4.1 Management Level Programme (Level 1)

The management level programme is used to establish work goals and overall time Frames for the works.

It is a statement of project objectives recorded in graphic form. The management level programme defines:

- Established goals or major milestones key dates,
- · The duration of major operations and their relationship to one another,
- · Identified Long Lead items,
- · Responsibility assignments for accomplishing project objectives.

6.4.2 Project Level Program (Level 2)

A "rolled up" programme from the control level programme is produced. It is separated by the work packages and by Phase.

6.4.3 Control Level Program (Level 3)

The project level programme is prepared representing the significant work activities and deliverables associated with the works. The end product is a time scaled bar-chart schedule developed through use of a logic network. This programme is separated by sections of the work package, by WBS.

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The work within each work package area is broken down by engineering discipline, procurement of tagged equipment and bulks, construction by contractor, and commissioning & start-up. The control level programme is resource-loaded.

6.4.4 Discipline Specially Programme (Level 4)

The need for supplemental or discipline speciality programme is dependent upon the requirements and/or circumstances of the contract.

The discipline speciality programme developed and maintained by the Contractor is generated for tracking and control of various activities and deliverables for all phases of the contract. This programme is usually formatted in MS Project report utilising the WBS structure.

This programme typically represents day-to-day tasks which are work package(phase 2 & Phase 3) based and become summarised in the Level 3 activities. Resource information for manpower, Plant, Material and Equipment and reflected in the resource histograms is to be provided by the Contractor. The

Contractor's programme is to align to the *Contractor's* Method Statement. The programme to shows the hold point and testing where applicable.

6.5 Submission of revised Programme and Progress Reporting

The Contractor submits two hard copies and one electronic copy in MS Project, of each revised programme and progress report to the Project Manager for acceptance. All formally issued reports are to follow the progress reporting requirements as stated below.

6.5.1 Status Reports

A status report is submitted by the Contractor to the Project Manager. This

Report should comply to section 5 of the document. Contents of a weekly report should include the following

items:

- · The updated MS Project programme
- Programme summary narrative
- Progress and performance summaries