

NEC3 Term Service Contract (TSC3)

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

and

for AUXILIARY COOLING OPEN CYCLE CHEMICAL SUPPLY AND SERVICE AT KUSILE POWER STATION FOR FIVE YEARS

Contents:		No of pages
Part C1	Agreements & Contract Data	[3]
Part C2	Pricing Data	[19]
Part C3	Scope of Work	[•]

CONTRACT No.

PART C1: AGREEMENTS & CONTRACT DATA

Contents:		No of pages
C1.1	Form of Offer and Acceptance	[•]
C1.2a	Contract Data provided by the Employer	[•]
C1.2b	Contract Data provided by the Contractor	[•]

C1.1 Form of Offer & Acceptance

a. Offer

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

AUXILIARY COOLING OPEN CYCLE CHEMICAL SUPPLY AND SERVICE AT KUSILE POWER STATION FOR FIVE YEARS

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	The offered total of the Prices exclusive of VAT is	
	Value Added Tax @ 15% is	
	The offered total of the amount due inclusive of VAT is1	

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	General Manager		
For the tenderer:			
	(Insert name and address of organisation)		
Name & signature of witness		Date	
Tenderer's CID	DB registration number:		

PART C2: PRICING DATA PAGE 3 C2 TSC3 COVER

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

Acceptance

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

The terms of the contract, are contained in:

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

Part C2 Pricing Data

Part C3 Scope of Work: Service Information

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

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

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

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

Signature(s)			
Name(s)			
Capacity	General Manager		
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.

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

No.	Subject	Details
1	N/A	N/A

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

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

	For the tenderer:	For the Employer
Signature		
Name		Bongumusa A, Mashazi
Capacity		General Manager
On behalf of	(Insert name and address of organisation)	Eskom Holdings SOC Limited Kusile Power Station R545 Kendal/Balmoral Rd Haartebeesfontein Farm Witbank
Name & signature of witness		
Date		

C1.2 TSC3 Contract Data

2. Part one - Data provided by the Employer

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	
		X1: Price adjustment for inflation
		X2 Changes in the law
		X17: Low service damages
		X18: Limitation of liability
		X19: Task Order
		Z: Additional conditions of contract
10.1	The Employer is (name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	011 800 8111
	Fax No.	
10.1	The Service Manager is (name):	
	Address	Kusile Power Station R545 Kendal/Balmoral Rd Haartebeesfontein Farm Witbank
	Tel	
	Fax	
	e-mail	
11.2(2)	The Affected Property is	Kusile Power Station
11.2(13)	The service is	AUXILIARY COOLING OPEN CYCLE CHEMICAL SUPPLY AND SERVICE AT KUSILE POWER STATION FOR FIVE YEARS

11.2(14)	The following matters will be included in the Risk Register	Access to the station Risk Identification and assessment meeting to be held subsequent to contract award and risk register compiled and managed.	
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	4 Weeks	
2	The <i>Contractor's</i> 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 week of the Contract Date	
3	Time		
30.1	The starting date is.		
30.1	The service period is	60 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	25 th 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 after invoice submitted and processed	
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	Any work or task undertaken outside the agreed scope of work
7	Use of Equipment Plant and Materials	Contractor to provide their equipment, tools where applicable plant. Third party equipment, tools and plant used at own risk
8	Risks and insurance	
80.1	These are additional <i>Employer</i> 's risks	1. [•] 2. [•] 3. [•]
83.1	The <i>Employer</i> provides these insurances from the Insurance Table	as stated for "Format TSC3" available on http://www.eskom.co.za/Tenders/InsurancePolicies Procedures/Pages/EIMS_Policies_ From_1_April_2014_To_31_March_2015.aspx (See Annexure A for basic guidance).
83.1	The <i>Employer</i> provides these additional insurances	as stated for "Format TSC3" available on http://www.eskom.co.za/Tenders/InsurancePolicies Procedures/Pages/EIMS_Policies_ From_1_April_2014_To_31_March_2015.aspx (See Annexure A for basic guidance)
83.1	The <i>Contractor</i> provides these additional insurances:	
83.1	The minimum amount of cover for insurance against loss and damage caused by the <i>Contractor</i> to the <i>Employer</i> 's property is	The amount of the deductibles relevant to the event described in the "Format TSC3" insurance policy available on http://www.eskom.co.za/Tenders/InsurancePolicies Procedures/Pages/EIMS_Policies_ From_1_April_2014_To_31_March_2015.aspx
83.1	The insurance against loss of or damage to the <i>works</i> , Plant and Materials is to include cover for Plant and Materials provided by the <i>Employer</i> for an amount of	
83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the <i>Employer</i> 's property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor</i> 's Providing the Service for any one event is:	Whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> .
83.1	The minimum limit of indemnity for insurance in respect of death of or bodily	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130

	injury to employees of the Contractor arising out of and in the course of their employment in connection with this contract for any one event is:	of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less tha R500 000 (Five hundred thousand Rands)	
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	a. 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	Republic of 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		

X1	Price adjustment for inflation The price will be fixed for the first year and subject to escalation after end of the first year						
X1.1	The base date for indices is	The base date for indices is		1 Month prior tender closing			
	The proportions used to calculate the Price Adjustment Factor are:		Index	Prop	oortion	Index prepared by	
			Fixed Portion Total	0.15			
X2	Changes in the law	Option an			no reference to Contract Data in this nd terms in italics are identified re in this Contract Data.		
X17	Low service damages						
X17.1	The service level table is in						
X17.1.1 X17.1.2 X17.1.3	Delivery of Incorrect or poor quality chemicals Response time for urgent breakdowns Turnaround time of analysis reports	Certificate of The Contra availability of of being breakdowns. The contract analysis re	ctor shall er delivered with analysis ictor shall er f technician 24 F	nsure the nsure lours rgent that	per inci	nonthly fixed cost dent nonthly fixed cost dent/ call- out.	
X17.1.4	Limitation of liability						
X18.1	The Contractor's liability to for indirect or consequentia to	R0.0 (zero Ranc	l)				
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 event described insurance policing http://www.eskor.procedures/PageFrom_1_April_20	d in the y avai m.co.z es/EIN	e "Forma lable on a/Tenders IS_Policie	t TSC3" s/InsurancePolicies s_	
X18.3	The Contractor's liability for Defects due to his design of an item of Equipment is limited to		The greater of			e Contract Date	

		 and the amounts excluded and unrecoverable from the <i>Employer</i>'s insurance (other than the resulting physical damage to the <i>Employer</i>'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 excluded matters, is limited to	the total of the Prices other than for the additional excluded matters. The Contractor's total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the Contractor 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 Employer'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	Months after the end of the service period.	
X19	Task Order		
X19.5	The Contractor submits a Task Order programme to the Service Manager within	Five (5) days of receiving the Task Order	
X19.5		Five (5) days of receiving the Task Order Z1 to Z14 always apply.	
	programme to the Service Manager within The additional conditions of contract		
Z	programme to the Service Manager within The additional conditions of contract are Cession delegation and assignment	Z1 to Z14 always apply. assign any of its rights or obligations to any person	
Z Z1	programme to the Service Manager within The additional conditions of contract are Cession delegation and assignment The Contractor does not cede, delegate or without the written consent of the Employer. Notwithstanding the above, the Employer medelegate its rights and obligations under this	Z1 to Z14 always apply. assign any of its rights or obligations to any person ay on written notice to the <i>Contractor</i> cede and a contract to any of its subsidiaries or any of its be converted into separate legal entities as a result	
Z Z1 Z1.1	The additional conditions of contract are Cession delegation and assignment The Contractor does not cede, delegate or without the written consent of the Employer. Notwithstanding the above, the Employer medelegate its rights and obligations under this present divisions or operations which may be	Z1 to Z14 always apply. assign any of its rights or obligations to any person ay on written notice to the <i>Contractor</i> cede and a contract to any of its subsidiaries or any of its be converted into separate legal entities as a result	
Z Z1 Z1.1 Z1.2	The additional conditions of contract are Cession delegation and assignment The Contractor does not cede, delegate or without the written consent of the Employer. Notwithstanding the above, the Employer medelegate its rights and obligations under this present divisions or operations which may be of the restructuring of the Electricity Supply Joint ventures If the Contractor constitutes a joint venture,	z1 to z14 always apply. assign any of its rights or obligations to any person any on written notice to the <i>Contractor</i> cede and a contract to any of its subsidiaries or any of its be converted into separate legal entities as a result Industry. consortium or other unincorporated grouping of two expersons or organisations are deemed to be jointly	
Z1 Z1.1 Z1.2	The additional conditions of contract are Cession delegation and assignment The Contractor does not cede, delegate or without the written consent of the Employer. Notwithstanding the above, the Employer medelegate its rights and obligations under this present divisions or operations which may be of the restructuring of the Electricity Supply Joint ventures If the Contractor constitutes a joint venture, or more persons or organisations then these and severally liable to the Employer for the Unless already notified to the Employer, the	z1 to z14 always apply. assign any of its rights or obligations to any person any on written notice to the <i>Contractor</i> cede and a contract to any of its subsidiaries or any of its be converted into separate legal entities as a result Industry. consortium or other unincorporated grouping of two expersons or organisations are deemed to be jointly	

Z 3	Change of Broad Based Black Economic Empowerment (B-BBEE) status
Z3.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.
Z3.2	The <i>Contractor</i> is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the <i>Service Manager</i> within thirty days of the notification or as otherwise instructed by the <i>Service Manager</i> .
Z3.3	Where, as a result, the <i>Contractor's</i> B-BBEE status has decreased since the Contract Date the <i>Employer</i> may either re-negotiate this contract or alternatively, terminate the <i>Contractor's</i> obligation to Provide the Service.
Z3.4	Failure by the <i>Contractor</i> to notify the <i>Employer</i> of a change in its B-BBEE status may constitute a reason for termination. If the <i>Employer</i> terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.
Z 4	Confidentiality
Z4.1	The <i>Contractor</i> 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 <i>Contractor</i> , enters the public domain or to information which was already in the possession of the <i>Contractor</i> at the time of disclosure (evidenced by written records in existence at that time). Should the <i>Contractor</i> disclose information to Others in terms of clause 25.1, the <i>Contractor</i> ensures that the provisions of this clause are complied with by the recipient.
Z4.2	If the <i>Contractor</i> is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the <i>Service Manager</i> .
Z4.3	In the event that the <i>Contractor</i> is, at any time, required by law to disclose any such information which is required to be kept confidential, the <i>Contractor</i> , to the extent permitted by law prior to disclosure, notifies the <i>Employer</i> so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the <i>Contractor</i> may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
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.
Z 5	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.
Z 6	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

	e u R	roper compliance with the Construction Regulations, all applicable health & safety laws nd regulations and the health and safety rules, guidelines and procedures provided for in his contract and generally for the proper maintenance of health & safety in and about the xecution of the service; and ndertakes, 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, uidelines and procedures otherwise provided for under this contract and ensures that his subcontractors, employees and others under the Contractor's direction and control, kewise observe and comply with the foregoing.				
env for		Contractor, in and about the execution of the service, complies with all applicable onmental laws and regulations and rules, guidelines and procedures otherwise provided nder this contract and ensures that his Subcontractors, employees and others under the ractor's direction and control, likewise observe and comply with the foregoing.				
Z 7	Provi	sion of a Tax Invoice and interest. Add to core clause 51				
Z7.1	claus <i>Empl</i>	n one week of receiving a payment certificate from the Service Manager in terms of core e 51.1, the Contractor provides the Employer with a tax invoice in accordance with the oyer's procedures stated in the Service Information, showing the amount due for payment to that stated in the payment certificate.				
Z7.2	If the <i>Contractor</i> does not provide a tax invoice in the form and by the time r contract, the time by when the <i>Employer</i> is to make a payment is extended time to the delayed submission of the correct tax invoice. Interest due by the of core clause 51.2 is then calculated from the delayed date by when payments.					
Z7.3	The Contractor (if registered in South Africa in terms of the companies Act) is require comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amende include the Employer's VAT number 4740101508 on each invoice he submits for pay					
Z8	Notifying compensation events					
Z8.1	Delet	e the last paragraph of core clause 61.3 and replace with:				
		e Contractor does not notify a compensation event within eight weeks of becoming aware of event, he is not entitled to a change in the Prices.				
Z 9	Empl	loyer's limitation of liability				
Z9.1		Employer's liability to the Contractor for the Contractor's indirect or consequential loss is d to R0.00 (zero Rand)				
Z9.2	Empl	Contractor's entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the oyer's liability under the indemnity is limited to compensation as provided for in core e 63 and X19.11 if Option X19 Task Order applies to this contract.				
Z10		ination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet , after the words "against it":				
Z10.1	or h	nad a business rescue order granted against it.				
Z11	Ethics					
For the pu	ırposes	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		means to harm or threaten to harm, directly or indirectly, an Affected Party or the				

Action		property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,				
Collusive Action		means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,				
Committing Party		means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,				
Corrupt A	Action	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,				
Fraudule Action	nt	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				
Prohibite Action	d	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.				
Z11.1		mitting Party may not take any Prohibited Action during the course of the procurement of ntract or in execution thereof.				
Party I action <i>Emplo</i> or in a		inployer may terminate the <i>Contractor</i> 's obligation to Provide the Services if a Committing has taken such Prohibited Action and the <i>Contractor</i> did not take timely and appropriate to prevent or remedy the situation, without limiting any other rights or remedies the yer has. It is not required that the Committing Party had to have been found guilty, in court by other similar process, of such Prohibited Action before the <i>Employer</i> can terminate the <i>ctor</i> 's obligation to Provide the Services for this reason.				
		Employer terminates the Contractor's obligation to Provide the Services for this reason, the ts due on termination are those intended in core clauses 92.1 and 92.2.				
Z11.4	Where	mitting Party co-operates fully with any investigation pursuant to alleged Prohibited Action. the <i>Employer</i> does not have a contractual bond with the Committing Party, the <i>Contractor</i> s 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.

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 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 Monitorina

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.

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

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

asbestos containing material, equipment and articles.

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

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

Material, Equipment and Articles.

means the South African National Accreditation System. SANAS

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

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

exposures, i.e. 10-minute TWA.

Z14.1 The Employer ensures that the Ambient Air in the area where the Contractor will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10minute 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 AAIAapproved 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

3. Part two - Data provided by the Contractor

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

CONTRACT NO. __ AUXILIARY COOLING OPEN CYCLE CHEMICAL SUPPLY AND SERVICE AT KUSILE POWER STATION FOR FIVE YEARS

	Experience:	
		CV's (and further key person's data including CVs) are in
A	Priced contract with price list	
11.2(12)	The price list is in	Rands
11.2(19)	The tendered total of the Prices is	Price List (C2.2)

PART 2: PRICING DATA

TSC3 Option A

Document reference	Title	No of pages
C2	Pricing assumptions: Option A	2
C2	The price list	[1]

C2.1 Pricing assumptions: Option A

1. How work is priced and assessed for payment

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

Identified and 11 defined terms 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.

2. Function of the Price List

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

3. Link to the Contractor's plan

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

4. Preparing the price list

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

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

- Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A;
- Understands the function of the Price List and how work is priced and paid for;
- Is aware of the need to link operations shown in his plan to items shown in the Price List;
- Has listed and priced items in the *price list* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate item within the Prices or rates of other listed items in order to fulfil the obligation to complete the service for the tendered total of the Prices.

Understands there is no adjustment to items priced as lump sums if the amount, or quantity, of
work within that item later turns out to be different to that which the *Contractor* estimated at time of
tender. The only basis for a change to the (lump sum) Prices is as a result of a compensation
event.

4.1 Format of the *price list*

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

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

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

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

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

C2.2 the price list

	2.2 the <i>price list</i>					
Description	Unit	Qty	Rate	Total Amount		
DREI IMINADIES AND GENERAL						
I KELIMINAKIES AND GENERAL						
Medicals and Induction	Once per Year	3				
PPE	Twice per Year	3				
Safety File	Once Off	1				
Travelling / Transport - LDV Van (1No for duration of project)	Per Month	60				
SITE CREW						
Task mission / Chamistay	Lleume	2				
·						
Galety Officer	110013	!				
SUB TOTAL AMOUNT - Section A+B						
Work to be performed by the appointed Service Provider :						
Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control	Litres	60000				
Non-Oxidising Biocide – supply, delivery,	Litres	60000				
Bio-dispersant- supply, delivery, offloading, dosing, monitoring and control	Litres	120000				
Scale/Corrosion inhibitor - supply, delivery, offloading, dosing, monitoring and control	Litres	90000				
Chemical dosing equipment East– erection, storage tanks, dosing pumps and piping	Sum	1				
Chemical dosing equipment – weekly inspections and maintenance	Sum	480				
Weekly cooling water analysis - report compilation and submittal	Each	480				
 total aerobic/anaerobic bacteria and H2S producers 	Each	120				
Installation of corrosion coupons and Monthly corrosion rate analysis – report compilation and submittal	Each	120				
Quarterly cooling water Legionella sampling and analysis-Report compilation and submittal	Each	40				
Six monthly cooling water sampling and analysis – report compilation and submittal	Each	20				
	PRELIMINARIES AND GENERAL Medicals and Induction PPE Safety File Travelling / Transport - LDV Van (1No for duration of project) SITE CREW Technician / Chemistry Safety Officer SUB TOTAL AMOUNT - Section A+B Work to be performed by the appointed Service Provider: Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control Non-Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control Bio-dispersant- supply, delivery, offloading, dosing, monitoring and control Scale/Corrosion inhibitor - supply, delivery, offloading, dosing, monitoring and control Chemical dosing equipment East—erection, storage tanks, dosing pumps and piping Chemical dosing equipment — weekly inspections and maintenance Weekly cooling water analysis - report compilation and submittal Monthly cooling water microbiological analysis – total aerobic/anaerobic bacteria and H2S producers Installation of corrosion coupons and Monthly corrosion rate analysis – report compilation and submittal Quarterly cooling water Legionella sampling and analysis-Report compilation and submittal Six monthly cooling water sampling and	PRELIMINARIES AND GENERAL Medicals and Induction PPE Safety File Travelling / Transport - LDV Van (1No for duration of project) SITE CREW Technician / Chemistry Safety Officer Hours SUB TOTAL AMOUNT - Section A+B Work to be performed by the appointed Service Provider: Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control Non-Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control Bio-dispersant- supply, delivery, offloading, dosing, monitoring and control Scale/Corrosion inhibitor - supply, delivery, offloading, dosing, monitoring and control Chemical dosing equipment East–erection, storage tanks, dosing pumps and piping Chemical dosing equipment — weekly inspections and maintenance Weekly cooling water analysis - report compilation and submittal Monthly cooling water microbiological analysis – total aerobic/anaerobic bacteria and H2S producers Installation of corrosion coupons and Monthly corrosion rate analysis – report compilation and submittal Quarterly cooling water Legionella sampling and analysis-Report compilation and submittal Six monthly cooling water sampling and analysis-Report compilation and submittal Six monthly cooling water sampling and Six monthly cooling water sampling and Six monthly cooling water sampling and	PRELIMINARIES AND GENERAL Medicals and Induction PPE Twice per Year Safety File Once Off Travelling / Transport - LDV Van (1No for duration of project) SITE CREW Technician / Chemistry Fafety Officer Toylor of the performed by the appointed Service Provider: Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control Non-Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control Bio-dispersant- supply, delivery, offloading, dosing, monitoring and control Bio-dispersant- supply, delivery, offloading, dosing, monitoring and control Scale/Corrosion inhibitor - supply, delivery, offloading, dosing, monitoring and control Chemical dosing equipment East-erection, storage tanks, dosing pumps and piping Chemical dosing equipment — weekly inspections and maintenance Weekly cooling water analysis - report compilation and submittal Monthly cooling water microbiological analysis - total aerobic/anaerobic bacteria and H2S producers Installation of corrosion coupons and Monthly corrosion rate analysis - report compilation and submittal Six monthly cooling water Legionella sampling and analysis-Report compilation and submittal Six monthly cooling water sampling and Six monthly cooling water sampling and Six monthly cooling water sampling and	PRELIMINARIES AND GENERAL Medicals and Induction PPE Twice per Year Twice per Year 3 Safety File Travelling / Transport - LDV Van (1No for duration of project) Per Month Frey Month Frechnician / Chemistry Fechnician / Chemistry Hours Safety Officer Hours Technician / Chemistry Hours Safety Officer Hours Technician / Chemistry Fer Month Sub TOTAL AMOUNT - Section A+B Work to be performed by the appointed Service Provider: Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control Non-Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control Sib-dispersant- supply, delivery, offloading, dosing, monitoring and control Scale/Corrosion inhibitor - supply, delivery, offloading, dosing, monitoring and control Scale/Corrosion inhibitor - supply, delivery, offloading, dosing, monitoring and control Chemical dosing equipment East—erection, storage tanks, dosing pumps and piping Chemical dosing equipment — weekly inspections and maintenance Weekly cooling water analysis - report compilation and submittal Monthly cooling water microbiological analysis—total aerobic/anaerobic bacteria and H2S producers Installation of corrosion coupons and Monthly corrosion rate analysis – report compilation and submittal Quarterly cooling water Legionella sampling and analysis-Report compilation and submittal Six monthly cooling water sampling and Each Feach Sum Havier 1 Litres 60000 Litres 60000 Litres 90000 Litres 90000 Litres 120 Each 120 Feach 480 Feach 40 Feach Feach		

1

PART C3: SCOPE OF WORK

SUB TOTAL AMOUNT - Section C		
TOTAL AMOUNT (A+B+C) EXCL. VAT		

PART 3: SCOPE OF WORK

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

C3.1: EMPLOYER'S SERVICE INFORMATION

Contents

Page

<u>1.</u>	Intro	<u>duction</u> .		Error!	Bookmark	not	defined.
2.	Supp	orting C	Clauses	Error!	Bookmark	not	defined.
	2.1	Scope		Error!	Bookmark	not	defined.
		2.1.1	<u>Purpose</u>	Error!	Bookmark	not	defined.
		2.1.2	Applicability	Error!	Bookmark	not	defined.
		2.1.3	Effective date	. Error!	Bookmark	not	defined.
	2.2	Norma	tive/Informative References	Error!	Bookmark	not	defined.
		2.2.1	Normative	. Error!	Bookmark	not	defined.
		2.2.2	Informative	Error!	Bookmark	not	defined.
	2.3	<u>Definiti</u>	<u>ons</u>	Error!	Bookmark	not	defined.
	2.4	Abbrev	<u>riation</u>	Error!	Bookmark	not	defined.
	2.5	Roles a	and Responsibilities	. Error!	Bookmark	not	defined.
		2.5.1	Contract Manager	Error!	Bookmark	not	defined.
		2.5.2	Contract Supervisor	Error!	Bookmark	not	defined.
	2.6	Proces	ss for Monitoring	Error!	Bookmark	not	defined.
	2.7	Relate	d/Supporting Documents	Error!	Bookmark	not	defined.
<u>3.</u>	Cont	ract Red	quirements	. Error!	Bookmark	not	defined.
_	3.1		ence to Eskom generic policies				
	3.2		ct Specifications				
			Supply of Chemicals				
		3.2.1	Chemical Dosing Monitoring				
		3.2.2	Chemicals used and monitoring				
		3.2.3	Cooling Water Treatment				
		3.2.4	Key Performance Indicators				
	3.3		<u>/ Management</u>				
	3.4		Management				
		3.4.1	Health and safety regulations				
		3.4.2	Permit to work system				
		3.4.3	Authorisation	Error!	Bookmark	not	defined.
		3.4.4	Plant Operation	Error!	Bookmark	not	defined.
		3.4.5	Task Risk Assessments	Error!	Bookmark	not	defined.
		3.4.6	Safety induction course	. Error!	Bookmark	not	defined.
		3.4.7	Local safety procedures	Error!	Bookmark	not	defined.
		3.4.8	Incidents/accidents	. Error!	Bookmark	not	defined.
		3.4.9	Fire prevention	Error!	Bookmark	not	defined.
		3.4.10	Statutory appointments	. Error!	Bookmark	not	defined.
		3.4.11	Safety Documentation.	Error!	Bookmark	not	defined.
	<u>3.5</u>	Enviro	nmental Management	Error!	Bookmark	not	defined.
		3.5.1	Environmental Policy and Waste Handling	Error!	Bookmark	not	defined.
		3.5.2	Disposal of Waste	Error!	Bookmark	not	defined.
		3.5.3	Hazardous Waste Disposal and Handling	Error!	Bookmark	not	defined.
	<u>3.6</u>	Plant S	Spares and Material	Error!	Bookmark	not	defined.

3.7 Site Services Provided by the Employer Error! Bookmark not defined. 3.7.1 General Error! Bookmark not defined. 3.7.2 Supply of Electricity Error! Bookmark not defined. 3.7.3 Water Error! Bookmark not defined. 3.7.4 Compressed Air Error! Bookmark not defined.	
3.7.2 Supply of Electricity Error! Bookmark not defined. 3.7.3 Water Error! Bookmark not defined.	
3.7.3 Water Error! Bookmark not defined.	
3 7 4 Compressed Air Front Bookmark not defined	
Compressed 7 in	
3.7.5 First Aid Centre Error! Bookmark not defined.	
3.7.6 Training Error! Bookmark not defined.	
3.8 Site Services Provided by the Contractor Error! Bookmark not defined.	
3.8.1 Electrical Equipment / Appliances, Lighting and Power Error! Bookmark not defined.	
3.8.2 Water connection to workshop/office facility external to main station building Error! Bookmark not of	defin
3.8.3 Compressed Air supply Error! Bookmark not defined.	
3.8.4 Housekeeping and security Error! Bookmark not defined.	
3.8.5 Working Hours Error! Bookmark not defined.	
3.8.6 Standby Services Error! Bookmark not defined.	
3.8.7 Accommodation and travelling Error! Bookmark not defined.	
3.8.8 Sub-contracting Error! Bookmark not defined.	
3.9 Common Site Services and Conditions Error! Bookmark not defined.	
3.9.1 Roads and vehicles Error! Bookmark not defined.	
3.9.2 Sanitary Facilities Error! Bookmark not defined.	
3.9.3 Clean-up after work Error! Bookmark not defined.	
3.10 Security Error! Bookmark not defined.	
3.10.1 Site access and departure Error! Bookmark not defined.	
3.10.2 Equipment and material removal from site Error! Bookmark not defined.	
3.10.3 Plant Access Error! Bookmark not defined.	
3.11 Site Establishment and Occupation Error! Bookmark not defined.	
3.11.1 Application for Site Establishment Error! Bookmark not defined.	
3.11.2 Site Occupation Error! Bookmark not defined.	
3.12 Termination of Occupancy Error! Bookmark not defined.	
3.13 Records Error! Bookmark not defined.	
3.14 Annexes Error! Bookmark not defined.	
4. Acceptance Error! Bookmark not defined.	
<u>5.</u> <u>Revisions</u> <u>Error! Bookmark not defined.</u>	
6. <u>Development Team</u> Error! Bookmark not defined.	
<u>7. Acknowledgements</u> Error! Bookmark not defined.	
Tables	
Table 1: Details of the Open Recirculation Cooling System	
Table 2: Filtered make up water, required cooling water specification and frequency of analysisix	

1. Description of the service

1.1. Introduction

Kusile Power Station utilizes two open cycle induced draft-cooling systems and two closed cycle cooling systems, namely West and East cooling plants. The closed circuit cooling system consists of conditioned demineralised water, which serves as a cooling medium to various auxiliary components in the power plant, whilst the open cycle cooling system uses filtered water as a cooling medium to the closed circuit cooling system. The West cooling plants serve units 1-3 and a common plant system and the East cooling plant serve units 4-6 and common plant system respectively. Potable water supply is provided as a stand-by (emergency) to the filtered water make-up. Each water type is supplied via different storage tanks and pumping systems.

2. Supporting Clauses

2.1. Scope

2.1.1. Purpose

This document aims at specifying Kusile power station chemistry function requirements for the proper running of Auxiliary Open Cycle Cooling System, in order to achieve excellent chemical control during the life time of the station.

2.1.2. Applicability

This document is applicable to:

- a) Kusile power station Chemical Services Department, Contractor and Subcontractors.
- b) Kusile Auxiliary Open Cycle Cooling System

2.1.3. Effective date

This document shall be effective from the date of authorisation.

2.2. Normative/Informative References

N/A

2.2.1. Normative

ISO 9001 Quality Management Systems
Occupational Health and Safety Act 85 of 1993

2.2.2. Informative

Chemistry Manual for Auxiliary and Ancillary cooling water systems - 240-1061921

Matimba Chemical Supply for Auxiliary Cooling and Water Treatment Plant Systems Contract (2010/05/13 – 2013/04/25)

Safety health and environment Specifications for Contractors - GVLIR 0007

Eskom Generation Asset Management Policy - GGPP 0975 Rev 0

Eskom Generation Asset Management Directive - GGD 1447 Rev 0

Power Station Classification Guideline - GGG 1099 Rev 0

Construction, Safety, Health and Environment Management in Eskom - 32/136 Rev 0 -

Eskom Generation Plant Safety Regulations - GGR 0992 Rev 2

Eskom Operating Regulations for High Voltage Systems - ESKPVAEY6

Eskom Information Security Policy - 32-85 Rev 0

Eskom Vehicle and Driver Safety Management Procedure - 32-93 Rev 0

3 Integrated Business improvement - prevention and improvement Standard - 6-366 Rev 0

Smoking policy - 32-36 Rev 0

Lifting Machine procedure - 32-255 Rev 0

Mandatory SHE requirements for the Eskom procurement and supply chain management process - 32-726 Rev 0

Application of KKS plant coding (for new builds) - NMP47-7 Rev 1

Generation Leading Metrics manual - GGM 1539 Rev 0

Routine Work Management manual - GGM1490 Rev 0

2.3. Definitions

Contractor: Service provider contracted for supplying specific service to Eskom, Kusile Power Station.

Employer: Eskom, or Eskom Kusile Power Station

2.4. Abbreviation

Abbreviation	Explanation
ВОМ	Bill of Material
FI	Financial
KKS	Kraftwerk-Kenzeichnungs System
LAR	Limited Access Register.
LOPP	Life of Plant Plan
MM	Materials Management
NCR	Non-Conformance Report
PM	Preventive Maintenance
PPB	Parts per Billion
PPM	Part per Million
RT&D	Research, Testing and Development

Abbreviation	Explanation
SAP PM	System Application Products Plant Maintenance
SMP	Standard Maintenance Procedure

2.5. Roles and Responsibilities

2.5.1. Contract Manager

- a) Ensures that financial monitoring and control of the contract stays within the allocated budget.
- b) Ensuring Health, Safety, Environmental and Quality compliance is maintained and the Company's procedures and objectives are achieved.
- c) Shall ensure that all actions listed in this scope of work are undertaken (follow up, advice, consultation).
- d) Ensures procurement and reconciliation of materials is carried out in accordance with Company procedures to best value and to prevent delays.
- e) Liaises with all relevant stakeholders for any input.
- f) The requirements as stated in this procedure are fulfilled accordingly.

2.5.2. Contract Supervisor

a) Shall implement this scope of work, perform random reviews and audits for adherence and provide assurance that any deviations will be corrected.

2.5.3. Senior Chemist

a) Shall provide advices and technical support when necessary.

2.6. Process for Monitoring

The system specification is stipulated in Table 1 for the Open system. The specification of the make-up water is specified in Table 2; the make-up source for the Open system can change in future, should this happen, this URS needs to be reviewed and the Contract Supervisor shall notify the contractor of such changes, However it is the responsibilities of the contractor to verify the qualities.

Table 1: Details of the Open Recirculation Cooling System

Cells	8
Delta T	6°C
Fill	Splash pack fill
Materials of construction	Mildsteel, Concrete, 304SS, Polypropelene, PVC
Max shell temperature	34°C
Supply temperature	28°C
Total Recirculation rate	1168 l/s per cell
Туре	Induced draft open cooling

2.7 Related/Supporting Documents

N/A

3. Contract Requirements

3.1. Adherence to Eskom generic policies

The Contractor shall comply with Eskom's policies and site regulations, including but not limited to, use of cell phones in restricted areas, adherence to Eskom's life-saving rules, adherence to Generation Occurrence Management Procedure, no smoking policy, zero tolerance on alcohol usage, etc. These requirements will be detailed during the induction training process.

3.2. Contract Specifications

The following work will be the Contractor's responsibility for East and West Auxiliary open cooling systems for the duration of the contract:

- a) Biocide Oxidising- Supply, delivery, offloading, dosing, replacement, monitoring and control
- b) Biocide Non-oxidising Supply, delivery, offloading, dosing, replacement, monitoring and control
- c) Bio-dispersant Supply, delivery, offloading, dosing, monitoring, replacement and control.
- d) Scale/Corrosion inhibitor Supply, delivery, offloading, dosing, replacement, monitoring and control
- e) Chemical dosing equipment Weekly inspections and maintenance.
- f) Weekly cooling water analysis Report compilation and submittal.
- g) Monthly cooling water microbiological analysis Total aerobic/anaerobic bacteria and H2S producers.
- h) Monthly corrosion rate analysis Report compilation and submittal.
- i) Six monthly cooling water microbiological analysis Report compilation and submittal.
- j) Quarterly Legionella Analysis Report compilation and submittal.
- k) The contractor must supply and install corrosion coupon on the East cooling system only.
- The contractor must supply Chemical dosing equipment for East cooling system— erection, storage tanks, dosing pumps and piping. West cooling system chemical dosing equipment has already been installed.

The contractor must supply the chemicals, determine the dosing rate & time interval and monitor the chemical conditions (weekly) of both East and West Auxiliary open cooling systems to meet the specifications in table 2.

Table 2: Filtered make up water, required cooling water specification and frequency of analysis

Chemical parameter	Units	Specification	Frequency For Eskom	Frequency Contractor
M-Alkalinity	mg/ℓ CaCO3	60 to 150	D	W

			I	
Calcium	mg/ℓ Ca	<200 to 400	W	W
Chloride	mg/l Cl	<400	W	W
Elect Conductivity	uS/m [25°C]	<3500	D	W
Iron	mg/ℓ Fe	<500	W	W
Magnesium	mg/ℓ Mg		W	W
Magnesium (Mg x SiO ₂)		<25000	W	W
рН	pH units [25°C]	8.3 to 8.9	D	W
Potassium	mg/ℓ K	<500	W	W
Silica	mg/ℓ Si	<150	W	W
Sodium	mg/ℓ Na	<500	W	W
Sulphate	mg/l SO4	<1000	W	W
Turbidity	NTU	<15	D	W
Oil & grease	mg/ℓ	<5	W	W
Total Hardness as CaCO ₃	mg/ℓ	<500	D	W
Calcium carbonate precipitation Using Stasoft 4	mg/ℓ	<30 with scale control program < 5 Without scale control program	W	W
Concentration Cycles		< 10	W	W
Total aerobic bacteria	CFUs.cm ³	<10000	6M	М

Total anaerobic bacteria	CFUs.cm ³	<1000	6M	М
Legionella	CFUs.cm ³	<100	Q	Q
H ₂ S producers	CFUs.cm ³	<10	6M	M
Mild steel corrosion rate	Mils/year	<5	6M	М

3.2.1. Supply of Chemicals

The contractor shall ensure that chemicals are ordered and delivered in time. The minimum amount of chemicals shall be 40% before topping up in order to ensure chemicals availability at all time. Chemicals supplied by the contractor are tested and approved by RT&D. The approval will be handed over to the employer for acceptance before chemicals are dosed into the plant. Delivery of chemicals will be notified to the Employer's representative 48 hours before delivery to the site can be made. Ignorance of this could result in chemicals being sent back at contractors own cost.

Off Loading of Chemicals: Offloading and filling of dosing tanks and removal of empty containers from site will be the Contractor's responsibility. The contractor must ensure that the off loaders are trained and declared competent. Competency certificates should be shared with the employer prior to the commencement of the contract

3.2.2. Chemical Dosing Monitoring

The contractor must supply the dosing equipment for East cooling system as required including dosing lines to the dosing points with stroke adjusters, pot test equipment, timers and containers with suitable volume, to contain sufficient chemicals until the next delivery date. (West cooling system dosing equipment installed). The contractor must supply any additional online monitoring equipment required to effectively monitor and control any chemical addition, corrosion / scaling potential and microbiological fouling potential on both East and West cooling. The employer will supply online conductivity and pH meter.

- A. Maintenance: The contractor will stay responsible for the maintenance of his equipment at his cost. No maintenance or repairs must be done without consulting the employers representative. The maintenance of equipment will be of such a nature that no failure would occur that will jeopardise the dosing of the plant.
- B. Electrical Supply Points for Pumps: The employer will provide the electrical supply points for the pumps. This supply points consists of 220V normal household three point plug.

3.2.3. Chemicals used and monitoring

The Contractor must determine the type and amount of chemicals used within the specified contract specifications and monitor the condition on a weekly basis to ensure they meet Eskom Auxiliary cooling standards 240-1061921. The contractor shall keep records of all analyses done (as per table 2), and a report to be handed over on the last Friday (and or not later than the last working day) of each month, for the duration of the contract to the Employer's representative. This report should include everything done by the Contractor during the month for chemicals usage, explain variance in chemical consumption, monitoring, pumps settings, maintenance and pot test results. Formal site meetings shall be held quarterly between the contractor and the employer, to discuss the reports and other contract related matters.

CONTRACT - xi - TSC3 COVER PAGES

3.2.4. Cooling Water Treatment

The contractor must establish the cooling water treatment that will prevent the following:

- A. Corrosion on heat exchangers.
- B. Precipitation of scale on heat exchanger surfaces and on the cooling tower packing.
- C. Fouling of pipe-work heat exchanger surfaces, cooling water packing and prevent micro biologically induced corrosion.
- D. Formation of algae, fungi, bacteria and other micro-organisms that can create a corrosive environment or impair heat transfer process.
- E. Foaming due to the addition of chemicals used.

The cooling water treatment system must allow sufficiently high cycles of concentration in order to obtain "Zero Liquid Effluent Discharge" without compromising other important aspects such as corrosion and scale formation. Treatment programs must strive to reduce the amount of Sulphuric acid used.

The contractor must check the pump settings and dosage weekly. The Contractor shall check and replace the corrosion coupons at least once in two months. The Contractor shall check bacteria count once monthly as stipulated in Table 2. The Contractor shall check legionella count at least once in six months. Legionella testing must be done using an accredited laboratory using the most probable number method (MPN).

The contractor must establish a disinfection program to be followed when Legionella or Bacteria counts exceed limits, the program must also cater for periodic preventative disinfection to be done, and the frequency of such a program shall be determined by the contractor based on the results obtained.

3.2.5. Key Performance Indicators

Performance of the Contractor shall be based on the Key performance criteria identified below by the employer. The employer together with the contractor shall verify and compare results on a monthly basis. Falsification or reporting of incorrect data to meet KPI's will lead to an NCR or termination of contract within a period determined by the employer. KPI's comprises of the following aspects:

- KPI 1: Late submission of reports to the employer
- KPI 2: Non-compliance to safety regulations
- KPI 3: Out of specification results

3.3. Quality Management

The Contractor must provide a complete Quality Assurance plan in accordance with the requirements of ISO 9001 2018 to the Employer for approval. This plan must ensure an integrated quality service as part of the contract. Execution of all quality related activities, including inspection and test plans compilation and execution, stores material quality inspections and all quality-related record keeping is part of the Contractor's scope of work.

3.4. Safety Management

3.4.1. Health and safety regulations

The Eskom document Safety Specifications for Contractors 32-136 is of primary importance in the management of safety on site. The Contractor shall comply with the Kusile Health and Safety Policy. It is expected that the contractor attend Kusile Monthly Safety meeting and Tool Box Talks, Project manager shall send the meeting appointments.

3.4.2. Permit to work system

No work shall be carried out without a "PERMIT TO WORK". The Contractor must ensure compliance to all requirements as per the Plant Safety Regulations and Operating Regulations for High-voltage Systems. The Contractor's Responsible Person must ensure that all sources of possible danger are isolated. Details of the Permit to Work system can be found in the Plant Safety Regulations (PSR) GGR 0992 and Operating Regulations for High Voltage Systems (ORHVS) ESKVAEY6.

Contract Supervisor shall ensure that the Contractor sign limited access register at Water Treatment Plant before accessing the plant. It is the responsibilities of the Contractor to ensure compliance to limited access register procedure. The following activities under limited access register procedure must satisfy the following criteria:

- There is no risk of trip
- There is no personal danger
- No plant isolation is required
- Activity duration is less than 12 hours
- Activity must be performed by a skilled person.

3.4.3. Authorisation

All Contractors must ensure they have responsible persons (in terms of PSR and ORHVS) for any work performed on the plant. This will require individuals to successfully complete a written and oral examination for the relevant regulation based on the Plant Safety Regulations and Operating Regulations for High Voltage Systems. All maintenance technically qualified (above semi-skilled) Contractors will be trained and authorised (in terms of PSR and ORHVS) within 3 months of contract award date. Training will be supplied by the Employer

3.4.4. Plant Operation

Only Eskom appointed personnel should operate plant.

3.4.5. Task Risk Assessments

The Employer and Contractor shall jointly conduct and document task risk assessments before work is performed. (According to procedure 32-520)

3.4.6. Safety induction course

A list of contractor employees requiring safety induction must be submitted at least 7 days in advance of arrival to site with the date and time of arrival so that the safety induction can be arranged prior. All the employees of the Contractor must attend a safety induction course before they are granted a site access permit. The induction-training program will cover safety rules and information essential to personnel employed on site, including Integrated Business Improvement (IBI) concepts. Site access permits remains the property of Eskom. Lost or damaged cards will be for the cost of the Contractor. The Contractor shall have no claim against the Employer in respect of delay at the security main gate.

3.4.7. Local safety procedures

The Contractor shall adhere to all local procedures. A list of local procedures is available on request from the Employer.

3.4.8. Incidents/accidents

All incidents and accidents must be reported to the Employer within 24 hours preferably during the same shift that the incident/accident occurred and the incident must be investigated within 7 days and corrective actions as well as recommendations should be put in place to prevent re-occurrences. An incident investigation report must be filed and closed-out with the Employers Risk management department. First aid and medical services will be available at the Kusile medical centre.

3.4.9. Fire prevention

Fire prevention and protection requirements to which Contractors must comply with will be detailed in the local procedures.

3.4.10. Statutory appointments

The Contractor shall comply with all statutory appointments required in terms of the Occupational Health and Safety Act of (No 85 of 1993) OHSA. All Contractors are expected to be conversant with and comply with all relevant requirements of the OHS Act.

3.4.11. Safety Documentation

The Contractor is responsible to have the following documentation available on site in accordance with the local procedures and with reference to the Eskom procedure 32-726:

- A. A copy of the OHS-Act.
- B. Safety organisation and appointments
- C. Copies of all site accident report forms as required by the OHS-Act.
- D. Copies of minutes of health and safety meetings held on site.
- E. Copies of inspection reports produced by the accident prevention officer.
- F. Task Risk Assessments that have been conducted jointly by the Employer and Contractor.

3.5. Environmental Management

3.5.1. Environmental Policy and Waste Handling

Kusile Environmental Policy must be adhered to.

3.5.2. Disposal of Waste

Waste shall be removed promptly to the designated disposal areas. No stockpiling will be permitted. The Contractor is to split the waste that can be recycled according to their classifications e.g. paper, glass,

3.5.3. Hazardous Waste Disposal and Handling

Hazardous/toxic waste includes all waste that contains elements or compounds listed as hazardous substances in terms of the Hazardous Substances Act No. 15 of 1973. The Contractor is responsible for the safe removal of their hazardous waste to Kusile's Hazardous Waste Storage Area. Other requirements for hazardous waste will be detailed in the local procedures. The Employer will be responsible for the safe removal of such waste to a registered Class I site by a waste removal and disposal Contractor (who will be required to produce a certificate of safe disposal in accordance with the local procedures). The Contractor must ensure that persons handling hazardous waste have undergone suitable training and are acquainted with cleaning methods in case of a spillage. The philosophy around spillages is whoever spills pays. Permission must be sought from the Employers Risk Management group prior to any hazardous materials being brought onto site.

3.6. Plant Spares and Material

3.6.1. Consumables

The Contractor is responsible to procure any consumables required in the execution of this scope of work.

3.7. Site Services Provided by the Employer

3.7.1. General

Use of services provided by the Employer where the benefit to be gained is not for Eskom Kusile Power Station, need to be formally approved by Kusile Power Station General Manager.

3.7.2. Supply of Electricity

Kusile Power Station supplies electricity needed for the execution of the Contractor's scope of work. All points of supply requested by the Contractor are provided in terms of quantity and location at the discretion of the Employer. Under no circumstances is the Contractor or Contractor's employees allowed connecting up to any electrical supply without the prior permission of the Employer. All electrical installations or portable electrical equipment used on Kusile site shall comply with all relevant statutory regulations and requirements. For Contractor owned electrical equipment not tracked on SAP PM, an asset register shall be kept containing as a minimum requirement, the maintenance strategy for each item in service. Inspections shall be completed and signed off based on the required frequency in the register stating reference numbers of supporting documents, date and persons' name responsible for the inspection.

Failure to comply with the safety requirements shall lead to immediate disconnection and an NCR shall be raised against the Contractor. No guarantees of power supply quality are given and power supply breaks of some duration may occur without warning and it shall not be grounds for additional time or compensation.

3.7.3. Water

Kusile Power Station supplies water needed for the execution of the Contractor's scope of work. Under no circumstances is the Contractor or Contractor's employees allowed to connect to any piped services without the permission of the Employer. The Employer makes available free of charge, potable water as required for the purpose of this Contract. The Employer does not guarantee continuity of supply and in such cases the Contractor makes provision for standby supplies to maintain continuity.

The Employer makes available, free of charge, demineralised water as required for the works. (Demineralised water and water for fire systems may not be consumed by human beings).

The variation of pressure in the water supply, or breakdown in the supply, is not considered grounds for additional time or compensation.

The Employer supplies a water connection point at the Contractors off-terrace allocated site area. The Contractor provides, at his own cost, all connection fittings, pipe work, temporary plumbing and pumps necessary to lead the water from the Employer's points of supply to the various points where it is required. The Contractor is responsible to maintain these facilities and to remove it at completion of the contracted work.

3.7.4. Compressed Air

Kusile Power Station supplies compressed air needed for the execution of the Contractor's scope of work. Under no circumstances is the Contractor or Contractor's employees allowed to connect to any piped services without the permission of the Employer. This supply is available for normal maintenance activities, and does not include for periods of extensive air consumption, e.g. during plant overhaul. The variation of pressure in the air supply, or breakdown in the supply, is not considered grounds for additional time or compensation.

CONTRACT - xv - TSC3 COVER PAGES

3.7.5. First Aid Centre

Medical, ambulance and first aid facilities are provided on site by the Employer.

3.7.6. Training

The Employer will supply training on all Eskom specific and other special initiatives at direct cost rates.

3.8. Site Services Provided by the Contractor

3.8.1. Electrical Equipment / Appliances, Lighting and Power

Any electrical equipment or appliances used by the Contractor must comply with all relevant safety regulations and requirements, and be maintained in safe and proper working condition.

Asset register to be maintained with corresponding history records (e.g. statutory inspections, repair reports)

3.8.2. Water connection to workshop/office facility external to main station building

The Contractor provides at his own cost, all connection fittings, pipe-work, temporary plumbing, and pumps necessary to lead the water from the point of supply to the various points where it is required, and maintain same in good condition. Excessive usage/consumption must be guarded against.

3.8.3. Compressed Air supply

The Contractor provides at own cost, all connection fittings and pipe-work necessary to lead the compressed air from the point of supply to the various points where it is required, maintain same and remove on completion of contract. Excessive usage/consumption must be guarded against.

3.8.4. Housekeeping and security

Each Contractor is responsible for the housekeeping of their workshop, office, work area, to a standard that is in line with Kusile PS management requirements. The Contractor is responsible for security of own facilities and equipment, as well as the equipment and facilities provided to the Contractor by the Employer.

3.8.5. Working Hours

A power station is a 24 hour/day, 7days/week, and 365-days/year business. Contractors will therefore have to ensure that staff is available to work extended shifts during times of plant emergency or high maintenance demand. The Employer must approve all overtime prior to any planned work.

3.8.6. Standby Services

The Contractor will ensure that staff with adequate expertise is available to manage plant issues on a 24-hour standby service. Response time to these standby services is 45 minutes.

3.8.7. Accommodation and travelling

The Contractor is responsible for staff accommodation, transportation and travelling cost.

3.8.8. Sub-contracting

All Sub-contractors are to be Employer approved Contractors / vendors / suppliers. If the Contractor is uncertain of the approval status of the Contractors / vendors / suppliers the Contractor formally requests from

the Employer confirmation of the status. The Contractor does not procure the services of Contractors / vendors / suppliers without the prior approval of the Employer.

3.9. Site Services and Conditions

3.9.1. Roads and vehicles

All traffic is limited to using existing roads.

All vehicles used on site, by the Contractor will be road worthy.

All road signs and traffic laws / regulations on site will be adhered to.

Damage caused to underground services, structures, etc., as a result of the Contractor not using the prescribed routes will be recovered from the Contractor.

All Contractors shall comply with Eskom Vehicle and Driver Procedure 32 – 93 and Construction Site Vehicles requirements.

3.9.2. Sanitary Facilities

The Employer will clean and maintain all toilet and shower/change room facilities on site.

3.9.3. Clean-up after work

The Contractor is responsible for cleaning up the work area. After completion of every works, the contract supervisor shall be called to inspect the site and ensure that it is in a presentable state. The Employer will perform ad-hoc inspections on the Contractor's work site.

3.10. Security

3.10.1. Site access and departure

All vehicles and persons entering or leaving site will be subjected to Security checks and or search. This includes, but is not limited to briefcases and toolboxes. Personal tools need to be listed and acknowledged by Security when brought on site. This list will be used for verification when the tools are removed from site.

3.10.2. Equipment and material removal from site

The Contractor is not allowed to remove any equipment or materials from site without producing the relevant forms or the equipment lists. If the equipment or material is to be removed the same day on which they were brought on to site, then the form will need to be produced at the gate when leaving the site. If the equipment or material is removed after this time then a Non-Returnable Gate

Release will be provided by the Employer's representative, on receipt of the original form with which the Contractor brought the equipment on site.

3.10.3. Plant Access

The Contractor and all contract employees will have to comply with all access requirements when working in areas designated as "limited access" areas e.g. equipment rooms, Transformer bays, switchgear rooms, etc. Entrance to these areas will be controlled using biometric control system (thumb print reader or any system that the Employer deems necessary), and will be monitored by Closed Circuit Television cameras.

3.11. Site Establishment and Occupation

3.11.1. Application for Site Establishment

The Employer allocates office and workshop sites and facilities. The location of the site or area is agreed upon during the site or area take-over inspection.

3.11.2. Site Occupation

The Contractor does not occupy any site, facility or area other than that allocated to him.

3.12. Termination of Occupancy

The site shall be vacated on completion or termination of contract within a reasonable time agreed with the Employer.

3.13. Records

None

3.14. Annexes

None

4. Acceptance

This document has been seen and accepted by:

Name	Designation
Joseph Ngqendesha	Engineering Group Manager (Acting)
Charlotte Tsumaki	Chemical Services Manager
Mohau Skhosana	Senior Technician Chemistry
Sithabile Ndlovu	Senior Technician Chemistry
Galeboe Kgarimetsa	Senior Supervisor Tech Chemistry
Evans Ramabina	Senior Chemist
Mpho Mokwena	Senior Supervisor Tech Chemistry
Bongani Ndala	Senior Supervisor Tech Chemistry

5. Revisions

Date	Rev.	Compiler	Remarks
September 2021	2	BK Manganyi	Review
January 2020	1	SP Ndlovu	New Contract Document

6. Development Team

The following people were involved in the development of this document:

- Sithabile Ndlovu
- Mohau Skhosana
- Khanyi Manganyi

7. Acknowledgements

The Development Team

2 Management strategy and start up.2.1 The Contractor's plan for the service

In the TSC3 the *Contractor's* plan is his "design" for performing the *service* throughout the *service* period. Section 2 of the *conditions of contract* describes what the *Contractor* is to show in his plan both in the core clauses and some additional requirements in each of the main Options.

The extent of the *Contractor*'s plan will depend on whether the *Contractor* is required to develop a plan in accordance with the *Employer*'s broad outline of the *service* or whether the *Employer* has provided a plan for the *Contractor* to follow. Read the TSC3 Guidance Notes pages 21 and 22 for more information on the *Contractor*'s plan.

Use this section to describe any particulars which must be taken into account by the *Contractor* in developing his plan as required by clause 21.2. For example information about the order and timing or method of carrying out particular items of work.

List technical reporting and scheduling requirements which are to be incorporated into the Contractor's plan.

2.2 Management meetings

The conditions of contract (e.g. Clause 16.2) and other sections of the Service Information (e.g. safety risk management) may require that a meeting shall be held. However the intention of all NEC contracts is that the Parties and their agents use the techniques of partnering to manage the contract by holding meetings designed to pro actively and jointly manage the administration of the contract with the objective of minimising the adverse effects of risks and surprises for both Parties.

Depending on the size and complexity of the *service*, it is probably beneficial for the *Service Manager* to hold a <u>weekly risk register meeting (Clause 16.2)</u>. This could be used to discuss safety, compensation events, subcontracting, overall co-ordination and other matters of a general nature. Separate meetings for specialist activities such as planning and activities of a technical nature may also be warranted.

Describe here the general meetings and their purpose. Provide particulars of approximate times, days, location, and attendance requirements, stipulating that attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings.

The following text could be used as a model for this section:

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	Weekly on Monday at 09:00	Kusile Power Station	Employer, Contractor
Operational and Liaison Meeting	Monthly, first Tuesday at 09:00	Kusile Power Station	Employer, Contractor and

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

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

CONTRACT - xix - TSC3 COVER PAGES

2.3 Contractor's management, supervision and key people

State any additional constraining requirements on *Contractor*'s supervision and key people that are not already stated in other sections such as for Health and Safety. This section could be used to solicit an organogramme from the *Contractor* showing his people and their lines of authority / communication. This would be essential if the *Contractor* is a Joint Venture.

2.4 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.

2.5 Documentation control

Specify how documentation will be identified with an alpha numeric which indicates source, recipient, communication number etc. Provide details of any particular format or other constraints; for example that all contractual communications will be in the form of properly compiled letters or forms attached to e mails and not as a message in the e mail itself. State any particular routing requirements but note from TSC3 who issues what to whom.

2.6 Invoicing and payment

The Z clauses make reference to invoicing procedures stated here in this Service Information. Also include a list of information which is to be shown on an invoice.

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

The Contractor shall address the tax invoice to

and include on each invoice the following information:

- Name and address of the *Contractor* and the *Service Manager*;
- The contract number and title;
- Contractor's VAT registration number;
- The *Employer*'s VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

2.7 Contract change management

This section is intended to deal with any <u>additional</u> requirements to the compensation event clauses in section 6 of the core clauses; such as the use of standard forms. Not the same thing as documentation control.

CONTRACT - xx - TSC3 COVER PAGES

2.8 Records of Defined Cost to be kept by the *Contractor*

If Option C or E applies first read clause 52.2 and then state whether the *Contractor* is required to keep any <u>other</u> records. Include any other constraint which may be required in regard to format and filing of the records, and whether access for the *Service Manager* shall be provided in hard copy or electronically.

Could delete if Option A applies unless the *Employer* requires some form of control over the *Contractor's* record keeping for the purpose of compensation event management.

2.9 Insurance provided by the *Employer*

First read TSC3 Core Clause 86.1 and then add anything necessary for the <u>management</u> of insurance related issues such as a cross reference to where procedures for making claims can be found. Also provide contact details for persons capable of being able to answer any insurance related queries the *Contractor* may have, as well as to whom the information required by Marine Insurance (if any) may be addressed.

2.10 Training workshops and technology transfer

Describe type and frequency of any on job training workshops, as well as any obligation for technology transfer being included as part of the *service* or at the end of the *service period*.

2.11 Design and supply of Equipment

On some complex services (e. g. nuclear) it could be in the Parties best interests that some details of the design of Equipment are shared with the *Service Manager*, not necessarily for his acceptance but as an assurance that the Equipment will be able to allow the *Contractor* to Provide the Service efficiently and without delay. For example specialised handling Equipment for a particular maintenance operation. Clause 23.1 is always available to the *Service Manager* if this paragraph is not used.

Also the *Employer* may wish to exercise constraints or include witness and hold points during manufacture, assembly or delivery of such Equipment. Include these constraints here.

Draft in such a way that there is no doubt that the liability for such design supply and use of the Equipment remains with the *Contractor*.

2.12 Things provided at the end of the *service period* for the *Employer's* use 2.12.1 Equipment

The *Employer* may wish to use some of the Equipment used by the *Contractor* after the end of the *service* period. Clause 70.2 requires that details of such requirement be stated in the Service Information. Complete here or if not applicable retain the heading and state 'None'.

2.12.2 Information and other things

Clause 70.2 requires that information and other things which the *Contractor* is to provide at the end of the *service period* be stated in the Service Information.

CONTRACT - xxi - TSC3 COVER PAGES

2.13 Management of work done by Task Order

Only use this heading if Option X19 applies to this contract.

In some cases all work may be done in terms of Task Orders in which case it may be logical to move this section closer to the start of this part 2 of the Service Information. In some cases only parts of the service may require to be handled by Task Order, for example a major repair which has become necessary during a continuous maintenance service contract.

Please read Option X19 before drafting requirements here as much of the procedure for the administration of Task Orders is already provided in X19, for example X19.2 specifies what a task Order should include

A Task Order format could be provided in an Annexure to this Service Information.

Many considerations can apply to Task Orders, such as availability of resources, arrangements for emergency work, Task Order reporting (work carried out and service results), assessment of additional Prices for *service* not included in the Price List etc.

Clause X19.6 requires information which should be included on a Task Order programme. Further requirements for Task Orders include things to be provided by the *Employer* under a Task Order and the conditions under which the *Employer* or Others are to work.

3 Health and safety, the environment and quality assurance 3.1 Health and safety risk management

In addition to the requirements of the laws governing health and safety, Eskom may have some additional requirements particular to the *service* and the Affected Property for this contract. The text below provides for these being attached as an Annexure to this Service Information. PLEASE ALSO READ CORE CLAUSE 27.4 TOGETHER WITH Z7 IN THE ADDITIONAL CONDITIONS OF CONTRACT TO MAKE SURE THAT WHATHEVER IS INCLUDED IN THE ANNEXURE FOLLOWS ON FROM THOSE CLAUSES.

The Divisional/Regional Safety Risk Manager or his representative having jurisdiction over the *service* must provide the relevant safety, health and environmental (SHE) criteria for incorporation into this Service Information. The SHE specification / scope must be signed off by the Divisional/Regional Safety Risk Manager or his representative confirming that the applicable safety criteria have been taken into account.

The Commodity Manager / Buyer must refer the tender to the Divisional/Regional Safety Risk Manager or his representative in order to evaluate against enquiry-specific safety criteria.

The Divisional Safety Risk Managers who will be responsible for the allocation of resources to assist P&SCM with the above processes are as follows:

•	Generation: Roley McIntyre
	Transmission: Tony Patterson
	Distribution: Alex Stramrood
	Enterprises: Jace Naidoo

Corporate: Kerseri Pather

The *Contractor* shall comply with the health and safety requirements contained in Annexure _____ to this Service Information.

3.2 Environmental constraints and management

Describe or cross refer to environmental constraints applicable to the *Contractor's* plan and his activities on the Affected Property and how they should be managed. Include here or cross refer to an Annexure to the Service Information.

The Contractor shall comply with the environmental criteria and constraints stated in Anne	xure

CONTRACT - xxii - TSC3 COVER PAGES

3.3 Quality assurance requirements

Specify minimum requirements for the *Contractor*'s Quality Plan and Work Procedures or provide the *Employer*'s Quality Plan if that is to be used. Make sure witness and hold points are identified generally and describe any particular requirements for QA outside the Affected Property. Indicate how the *Contractor*'s QA documentation is to be submitted for acceptance and any conditions that need to be imposed relating to acceptance. State whether ISO compliance is a condition and if so which ISO standard shall apply.

4 Procurement

There is a cross reference from the core clause 11.2(6) definition of Disallowed Cost to the Service Information regarding procurement procedures. This part of the Service Information MUST include any such procedures to be able to administer Disallowed Cost.

4.1. People

4.1.1. Minimum requirements of people employed

Specify any constraints relating to people employed to Provide the Service; for example permits for foreigners, training (other than H & S), use of labour from designated areas and industrial relations.

4.1.2. BBBEE and preferencing scheme

Specify constraints which *Contractor* must comply with after contract award in regard to any Broad Based Black Economic Empowerment (B-BBEE) or preferencing scheme measures.

4.2. Subcontracting

4.2.1. Preferred subcontractors

TSC3 does not make use of nominated subcontracting, but the *Employer* may list which subcontractors or suppliers the *Contractor* is required to enter into subcontracts with. This is usually only required where specialist services need to be obtained from a particular supplier or group of suppliers in order to comply with operational standards.

4.2.2. Subcontract documentation, and assessment of subcontract tenders

Specify any constraints on how the *Contractor* is to prepare subcontract documentation, whether use of the NEC system is compulsory or not (compulsory is recommended) and how subcontract tenders are to be issued, received, assessed (using a joint report?) and awarded.

4.2.3. Limitations on subcontracting

The *Employer* may require that the *Contractor* must subcontract certain specialised work, or that the *Contractor* shall not subcontract more than a specified proportion of the whole of the contract.

4.2.4. Attendance on subcontractors

State requirements for attendance on Subcontractors, if any

4.3. Plant and Materials

4.3.1. Specifications

Plant and Materials are defined as items intended to be included in the Affected Property. This will refer to replacement of worn or defective parts, routine replacement as part of regular preventative maintenance and supply of spare parts. Quality is usually designed in or specified in the technical specifications. However to cover circumstances where quality may not be prescribed, this sub-paragraph could also be used to state an overarching default requirement – fitness for purpose etc.

Either specify here or provide a list of the applicable specifications and attach them as Annexure or state where they can be obtained from.

4.3.2. Correction of defects

State any constraints when dealing with defective Plant and Materials such as how repairs are carried out - can the item be fixed up or must it be replaced by a new one.

4.3.3. Contractor's procurement of Plant and Materials

Specify any constraints on how the *Contractor* is to order, codify, expedite, freight, import, transport to the Affected Property and any other requirements for delivery and storage before installation. The *Employer* may require warranties from suppliers to be in favour of the *Employer* and not just to the *Contractor*. The *Employer* may also need schedules of vendor data for his own use after the end of the *service period*.

4.3.4. Tests and inspections before delivery

Core Clause 41.1 makes reference to the Service Information stating which Plant and Materials are to be inspected and tested before delivery. Specify any requirements particularly if such tests and inspections are to be carried out by agents of the *Employer* overseas.

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

List any Plant and Materials which are to be provided by the *Employer*.

State arrangements for collection by *Contractor* or delivery by others on behalf of the *Employer*, off loading, inspection, storage, care custody and control, return of unused Plant and Materials, etc. Always include a statement to the effect that 'all other Plant and Materials are to be provided by the *Contractor*'.

4.3.6. Cataloguing requirements by the Contractor

State whether cataloguing is applicable, if it is, reference the requirements for cataloguing that need to be satisfied by the *Contractor* (consult Procurement Instruction Number 1 of 2018 – Incorporating Cataloguing into the Procurement Environment, Unique Identifier 240-1289988974).

5. Working on the Affected Property

This part of the Service Information addresses constraints, facilities, services and rules applicable to the *Contractor* whilst he is doing work on the Affected Property.

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

Sites such as Koeberg Nuclear Power Station have very strict entrance requirements which tendering contractors need to allow for in their prices, and the *Contractor* has to comply with. State these or similar requirements here.

In addition to the above there may be other restrictions once on the site, plus rules relating to roads, walkways and the provision of barricades

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

Restrictions and hours of work may apply on some sites. It is very important that the *Contractor* keeps records of his people working on the Affected Property, including those of his Subcontractors. State that the *Service Manager* shall have access to them at any time. These records may be needed when assessing compensation events.

5.3. Health and safety facilities on the Affected Property

Section 3 deals with contractual H & S requirements in addition to those of the OHSA Act. This section allows the *Employer* to state what measures are to be taken on the Affected Property by describing where First Aid facilities provided by the *Employer* are located and any other emergency arrangements. Do not use if already addressed in 2.3.

5.4. Environmental controls, fauna & flora

This sub-paragraph may not be required in a service contract or if these matters are dealt with in the general environmental requirements referred to in section 3 above.

5.5. Cooperating with and obtaining acceptance of Others

This sub-paragraph could be used to deal with two issues.

- 1) The cross reference from core clause 25.1 about cooperation generally as well as details about Others with whom the *Contractor* may be required to share the Affected Property. See clause 11.2(9) for the definition of Others.
- 2) Requirements for liaison with and acceptance from statutory authorities or inspection agencies.

5.6. Records of *Contractor's* Equipment

This sub-paragraph is intended to address how records are to be kept of Equipment on Site including whether it is owned or hired. Include any constraints about scaffolding, rigs, heavy lifts and cranes, including removal from the Affected Property.

5.7. Equipment provided by the *Employer*

Provide details of equipment (e.g. overhead cranes) made available for use by the employer and set out conditions relating thereto.

5.8. Site services and facilities

5.8.1. Provided by the Employer

This is a mandatory cross reference form clause 25.2 in TSC3. State what the *Employer* will provide in the way of power, water, waste disposal, telecomms, ablutions, fire protection and lighting (etc) on the Affected Property. Give hook up locations and any constraints on how the hook up is to be done. Always conclude by stating that the *Contractor* shall provide everything else necessary for Providing the Service.

5.8.2. Provided by the *Contractor*

Describe what the *Contractor* is to provide in the way of accommodation, laboratories, storage, vehicles and office equipment for the *Service Manager* and any restrictions or minimum requirements concerning the *Contractor*'s own facilities. Also state what happens to these facilities upon completion of the contract.

5.9. Control of noise, dust, water and waste

State requirements, if any.

5.10. Hook ups to existing works

State any constraints

5.11. Tests and inspections

5.11.1. Description of tests and inspections

Describe the tests and inspections to be carried out by the *Contractor* and the *Service Manager* and others [40.1].

5.11.2. Materials facilities and samples for tests and inspections

State what materials facilities and samples for tests and inspections the *Contractor* and the *Employer* are to provide, per core clause 40.2.

CONTRACT - xxvi - TSC3 COVER PAGES

6. List of drawings

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

Drawing number	Revision	Title