

# **NEC3 Term Service Contract (TSC3)**

Between ESKOM HOLDINGS SOC LIMITED (Reg No. 2002/015527/06)

The works consists of inspection, maintenance, refurbishment/overhaul and service exchange of sluice pumps from unit 1 to 6, Booster pumps, Secondary CW pump and AWR system pumps

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Part C1 Agreements & Contract Data

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**CONTRACT No.** 

# PART C1: AGREEMENTS & CONTRACT DATA

Contents:

No of pages

C1.1 Form of Offer and Acceptance

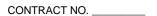
[to be inserted from Returnable Documents at award stage]

C1.2a Contract Data provided by the Employer

C1.2b Contract Data provided by the Contractor

[to be inserted from Returnable Documents at award stage]

C1.3 Proforma Guarantees





## C1 Agreements & Contract Data

## C1.1 Form of Offer and Acceptance

### Offer

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

The works consists of inspection, maintenance and refurbishment/overhaul of sluice pumps from unit 1 to 6, Booster pumps and AWR system pumps. The tenderer, identified in the signature block below, having examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

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

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

Signature(s)	
Name(s)	

ESKOM HOLDINGS SOC Ltd PROJECT OR CONTRACT TITLE The works consists of inspection, maintenance, refurbishment/overhaul and service exchange of sluice pumps from unit 1 to 6, Booster pumps, Secondary CW pump and AWR system pumps	CONTRACT NO
Capacity	
For the tenderer:	(Insert name and address of organisation)
Name & signature of witness	Date
Tenderer's CIDB registration number:	N/A

ESKOM HOLDINGS SOC Ltd
PROJECT OR CONTRACT TITLE
The works consists of inspection, maintenance, refurbishment/overhaul and service exchange of sluice pumps from unit 1 to 6, Booster pumps, Secondary CW pump and AWR system pumps

# CONTRACT NO. \_\_\_\_\_

## **Acceptance**

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

The terms of the Contract, are contained in:

Part 1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part 2 Pricing Data

Part 3 Scope of Work: 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 Tender Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the duly authorised representative(s) for both parties.

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

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

Signature(s)	

PROJECT The work refurbish pumps fi	OLDINGS SOC Ltd OR CONTRACT TITLE ks consists of inspection, manment/overhaul and service rom unit 1 to 6, Booster pun nd AWR system pumps	exchange of sluice		CONTRACT NO.
Name(	s)			
Capaci	ty			
for the Emplo			(Insert name and add	ress of organisation)
Name of signatures	ire of		Date	
Note: 1. 2.	& Acceptance would negotiation between the tendering. The extent of deviation the tender closing date and tender. A tenderer's covering Should any matter in subject of agreement outcome of such agreement	not be required to e Parties and is a strom the tender is limited to the letter must not buch letter, which reached during the ement shall be	to award of contract. If the contract has a not the result of a produced in terms of the constitutes a deviation the process of Offer a recorded here and the corporate the effect of its second to the contract. If the contract has a produced to the contr	been developed by ocess of competitive the Employer prior to of the Conditions of contract document, as aforesaid be the nd Acceptance, the se final draft of the
No.	Subject	Details		
1				
2				
3				
4				
5				
6				

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

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ESKOM HOLDINGS SOC Ltd
PROJECT OR CONTRACT TITLE
The works consists of inspection, maintenance,
refurbishment/overhaul and service exchange of sluice
pumps from unit 1 to 6, Booster pumps, Secondary CW
pump and AWR system pumps
pullip and AVVIX System pullips

deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

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

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

C

# C1.2 TSC3 Contract Data

# 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: X2:	Price adjustment for inflation Changes in law
		X17:	Low Service Damages
		X19:	Task Order
		X18:	Limitation of liability
		Z:	Additional conditions of contract
	of the NEC3 Term Service Contract (June 2005) <sup>1</sup>		
10.1	The <i>Employer</i> is (name):	2002/ incor	m Holdings Limited (reg no: /015527/06), a juristic person porated in terms of the company of the Republic of South Africa
	Address		a Power Station ox 2199 ank

<sup>&</sup>lt;sup>1</sup> Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009

	Tel No.	+27 13 690 0169
	Fax No.	+27 86 608 3558
10.1	The Service Manager is (name):	Morgan Ditshego
	Address	Duvha Power Station PO Box 2199 Witbank 1035
	Tel	+27 13 690 0169
	Fax	+27 86 6083 558
	e-mail	malemomm@eskom.co.za
11.2(2)	The Affected Property is	Work will be done off side
11.2(13)	The service is	The works consists of inspection, maintenance, refurbishment/overhaul and service exchange of sluice pumps from unit 1 to 6, Booster pumps, Secondary CW pump and AWR system pumps
11.2(14)	The following matters will be included in the Risk Register	<ul> <li>Late collection of pump penalty. 2% of order value per day</li> <li>Late striping of pump 2% penalty of order value per day</li> <li>Late delivery 5% penalty of order value per day</li> <li>Premature fail of the pump due to incorrect assembly contractor will collect the pump correct the defects within 24hour after pump are collected on the cost of the contractor.</li> <li>Late submission of QCP 3% penalty of order value.</li> </ul>
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	One day
2	The <i>Contractor</i> 's main responsibilities	The inspection, maintenance and refurbishment/overhaul of sluice pumps from unit 1 to 6, Booster pumps, Secondary CW Pumps and AWR system pumps
21.1	The Contractor submits a first plan for acceptance within	10 working days after contract award
3	Time	10:00 AM
30.1	The starting date is.	01 June 2023
30.1	The service period is	36 Months (3 year)
4	Testing and defects	Day after completing the task
5	Payment	After every assessment
50.1	The assessment interval is	After completion of each pump
51.1	The currency of this contract is the	South African Rand
51.2	The period within which payments are made is	14 Days
51.4	The interest rate is	(i) zero percent above 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 (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	No work will be done outside the contract scope
	These are additional compensation events:	N/A 1
		2 N/A
7	Use of Equipment Plant and Materials	Only fork lift when loading the pump will be provided by employer
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1.
		2.
		3.
83.1	The <i>Employer</i> provides these insurances from the Insurance Table	as stated for "Format TSC3" available on <a href="http://www.eskom.co.za/live/content.php?ltem_ID=9248">http://www.eskom.co.za/live/content.php?ltem_ID=9248</a> (See Annexure A for basic guidance).
83.1	The <i>Employer</i> provides these additional insurances	as stated for "Format TSC3" available on <a href="http://www.eskom.co.za/live/content.php?ltem_ID=9248">http://www.eskom.co.za/live/content.php?ltem_ID=9248</a> (See Annexure A for basic guidance)
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 <a href="http://www.eskom.co.za/live/content.php?ltem_ID=9248">http://www.eskom.co.za/live/content.php?ltem_ID=9248</a>

83.1	The minimum amount of cover for loss of or damage to Plant and Materials provided by the <i>Employer</i> is:	the amount of the deductibles relevant to the event described in the "Format TSC3" insurance policy available on <a href="http://www.eskom.co.za/live/content.php?ltem_ID=9248">http://www.eskom.co.za/live/content.php?ltem_ID=9248</a>
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 injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands)
9	Termination	There is no Contract Data required for this section of the <i>conditions of contract</i> .
10	Data for main Option clause	
Α	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	4 weeks.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is (Name)	Either State the name of the person selected & complete the contact details below Or, state the person selected from the Eskom Panel of Adjudicators listed in Annexure B to this Contract Data by the Party intending to refer a dispute to

		him.		
	Address			
	Tel No.			
	Fax No.			
	e-mail			
W1.2(3)	The Adjudicator nominating body is:	Division of of Civil Eng	an of the Join the South Afri gineering. (See civils.co.za)	can Institution
W1.4(2)	The tribunal is:	arbitration		
W1.4(5)	The arbitration procedure is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.		
	The place where arbitration is to be held is	South Afric	ca	
	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	nominee o	nan for the time f the Associati s (Southern Afr body.	on of
12	Data for secondary Option clauses			
12	Data for secondary Option clauses			
X1	Price adjustment for inflation			
X1.1	The base date for indices is	December	<mark>2018</mark>	
	The proportions used to calculate the Price Adjustment Factor are:	proportion	linked to index for	Index prepared by SEIFSA
		<mark>70</mark>	Labour	Table C3
		<mark>20</mark>	Consumables	CPI Headline
			-	

The works consists of inspection, maintenance, refurbishment/overhaul and service exchange of sluice pumps from unit 1 to 6, Booster pumps, Secondary CW pump and AWR system pumps

		10	non-adjustable
		1.00	•
X17	Low service damages	(Deduction value)	of 1% to 5% of the order
		substandard deduct per clause.  • Late collorder va • Late striporder va • Late deliper day • Prematurincorrect collect the within 24 on the cellorder value.	e Contractor produces d work the Employer can sentage indicated as per these dection of pump penalty. 2% of lue per day ping of pump 2% penalty of lue per day ivery 5% penalty of order value are fail of the pump due to the assembly contractor will ne pump correct the defects shour after pump are collected ost of the contractor. Semission of QCP 3% penalty of lue.
X18	Limitation of liability		
X18.1	The Contractor's liability to the Employer for indirect or consequential loss is limited to	R0.0 (zero	Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	to the even	t of the deductibles relevant it described in the "Format urance policy available on eskom.co.za/live/content.php?lt 8
X18.3	The Contractor's liability for Defects due to his design of an item of Equipment is limited to	Date and the amo	r of I of the Prices at the Contract ounts excluded and verable from the <i>Employer</i> 's

Z	The additional conditions of contract are	Z1 to Z11 always apply.
X18.5	The end of liability date is	N/A
		<ul> <li>Defects due to his design, plan and specification,</li> <li>Defects due to manufacture and fabrication outside the Affected Property,</li> <li>loss of or damage to property (other than the <i>Employer</i>'s property, Plant and Materials),</li> <li>death of or injury to a person and</li> <li>infringement of an intellectual property right.</li> </ul>
	matters, is inflited to	limited.  The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for
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
V40.4		insurance (other than the resulting physical damage to the <i>Employer</i> 's property which is not excluded) plus the applicable deductibles in the <i>Employer</i> 's assets and works / maintenance policies available on <a href="http://www.eskom.co.za/live/content.php?ltem_ID=9248">http://www.eskom.co.za/live/content.php?ltem_ID=9248</a>

# Z1 Cession delegation and assignment

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the

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Electricity Supply Industry and the Electricity Distribution Industry.

## Z2 Joint ventures

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

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

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

# Z4 Ethics

Z4.1 Any offer, payment, consideration, or benefit of any kind made by the *Contractor*, which constitutes or could be construed either directly or indirectly as an illegal or corrupt practice, as an inducement or reward for the award or in execution of this contract constitutes grounds for terminating the *Contractor's* obligation to Provide the Service or taking any other action as appropriate

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against the Contractor (including civil or criminal action).

- Z4.2 The *Employer* may terminate the *Contractor*'s obligation to Provide the Service if the *Contractor* (or any member of the *Contractor* where the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations) is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices.
  - Such practices include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the *Employer* or other people or organisations and including in circumstances where the *Contractor* or any such member is removed from the an approved vendor data base of the *Employer* as a consequence of such practice.
- Z4.3 Notwithstanding the provisions of core clause 90.2, the procedures on termination in terms of this clause are P1, P2 and P4 as stated in the core clause 92 and the amount due is A1 and A3 as stated in core clause 93.

# Z5 Confidentiality

- Z5.1 The Contractor does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the Contractor, enters the public domain or to information which was already in the possession of the Contractor at the time of disclosure (evidenced by written records in existence at that time). Should the Contractor disclose information to Others in terms of clause 25.1, the Contractor ensures that the provisions of this clause are complied with by the recipient.
- Z5.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.
- Z5.3 In the event that the Contractor is, at any time, required by law to disclose any such information which is required to be kept confidential, the Contractor, to the extent permitted by law prior to disclosure, notifies the Employer so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the Contractor may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z5.4 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

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pumps from unit 1 to 6, Booster pumps, Secondary C\	Ν
pump and AWR system pumps	

Service Manager. All rights in and to all such images vests exclusively in the *Employer*.

Z5.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

# Z6 Waiver and estoppel: Add to core clause 12.3:

Z6.1 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.

# Z7 Health, safety and the environment: Add to core clause 27.4

- Z7.1 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 2003
    (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the
    Construction Regulations") for the Affected Property;
  - warrants that the total of the Prices as at the Contract Date includes a
    sufficient amount for proper compliance with the Construction Regulations,
    all applicable health & safety laws and regulations and the health and safety
    rules, guidelines and procedures provided for in this contract and generally
    for the proper maintenance of health & safety in and about the execution of
    the service; and
  - undertakes, in and about the execution of the service, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the Contractor's direction and control, likewise observe and comply with the foregoing.
- Z7.2 The Contractor, in and about the execution of the service, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the Contractor's direction and control, likewise observe and comply with the foregoing.

## Z8 Provision of a Tax Invoice and interest. Add to core clause 51

Z8.1 Within one week of receiving a payment certificate from the Service Manager in

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terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer*'s procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

- Z8.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z8.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

# Z9 Notifying compensation events

Z9.1 Delete from the last sentence in core clause 61.3, "unless the *Service Manager* should have notified the event to the *Contractor* but did not".

# Z10 *Employer's* limitation of liability

- Z10.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z10.2 The *Contractor*'s entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer*'s liability under the indemnity is limited to compensation as provided for under the compensation events stated in this contract.
- Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":
  - Z11.1 or had a judicial management order granted against it.

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## Annexure A:Insurance provided by the Employer

These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer. Details of the insurance itself are available from the internet web link given below.

- 1. Services provided in a TSC3 contract could include some element of construction or refurbishment as well as a continuous maintenance or operational service activity. If an event occurs which causes loss or damage, a claim could be made either against the *Employer*'s "works" type policy which may be in place for the *Employer*'s portion of the Affected Property concerned or against the *Employer*'s assets policy which may be in place for the *Employer*'s portion of the Affected Property concerned, or both.
- 2. The cover provided and the deductibles under the works policy are different to those under the assets policy. Each policy has a range of applicable deductibles depending on the location of the Affected Property and the nature of the insurable event.
- 3. The Contractor is required in terms of Contract Data for clause 83 to provide cover for the deductibles in the insurance provided by the Employer. This can be provided from his own resources on a 'self insured' basis or obtained by him from his own insurers. In order to assess the extent of this cover, tendering contractors and their brokers should consult the internet web link given below and scroll to 'Format TSC3' to establish both the cover and the deductibles in relation to the service provided in terms of this contract.
- 4. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 83.2. In terms of clause 83.1 "the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide". Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
- 5. If Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom's Marine Policies Procedures found at internet website given below.
- 6. Further information and full details of all Eskom provided policies and procedures may be obtained from:

http://www.eskom.co.za/live/content.php?ltem ID=9248

# Annexure B:The Employer's Panel of Adjudicators

The following persons listed in alphabetical order of their surname have indicated their willingness to be included in the Eskom Panel of Adjudicators. Their CV's may be obtained by using the contact details provided.

Name	Location	Contact details (phone & e mail)
Nigel ANDREWS	Gauteng	+27 11 836-6760 nigela@quoin.net
Andrew BAIRD	Gauteng	+27 11 803 3008 andrewbaird@ecsconsult.co.za
Christopher BINNINGTON	Gauteng	+27 11 888-6141 cdb@bca.co.za
Peter HIGGINS	UK	+44 1293 873 868 peterhiggins@pdconsult.co.uk
Bruce LEECH	Gauteng	+27 11 290 4000 leech@counsel.co.za
Nigel NILEN	Gauteng	+27 11 465 3601; nilences@global.co.za
Robert St. LEGER	Cape Town	+27 21 794 7488 bobst@iafrica.com
Peter THURLOW	Gauteng	+27 11 787 6226 info@thurlowassoc.com

Information about the Panel and appointment of the selected Adjudicator is in

ESKOM HOLDINGS SOC Ltd
PROJECT OR CONTRACT TITLE
The works consists of inspection, maintenance,
refurbishment/overhaul and service exchange of sluice
pumps from unit 1 to 6, Booster pumps, Secondary CW
pump and AWR system pumps

CONI	TRACT NO	`
CCNA	IKALINU	).

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

Completion of the data in full is essential to create a complete contract.

10.1	The Contractor is (Name):	
	Address	
	Tel No.	
	Fax No.	
	E-mail address	
63.2	The percentage for overheads and profit added to the Defined Cost for people is	%
63.2	The percentage for overheads and profit added to other Defined Cost is	%
11.2(4)	The Price List is in	N/A
11.2(4)	The offered total of the Prices for part of the service in Part 1 of the Price List is [Enter the total of the Prices from the Price List]:	R excluding VAT [in words]
11.2(4)	The offered total of the Prices for part of the service in Part 2 of the Price List is [Enter the total of the Prices from the Price List]:	R excluding VAT [in words]
	uie i lice Listj.	excluding VAT

1Name:

Job:

Responsibilities:

Qualifications:

Experience:

The works consists of inspection, maintenance refurbishment/overhaul and service exchange pumps from unit 1 to 6, Booster pumps, Secondary and AWR system pumps	of sluice
2 Name:	
Job	
Responsibilities:	
Qualifications:	
Experience:	
	CV's (and further key person's data including CVs) are in .
Priced contract with price list	
The price list is in	
The tendered total of the Prices is	R

ESKOM HOLDINGS SOC Ltd PROJECT OR CONTRACT TITLE

CONTRACT NO. \_\_\_\_\_

ESKOM HOLDINGS SOC Ltd
PROJECT OR CONTRACT TITLE
The works consists of inspection, maintenance,
refurbishment/overhaul and service exchange of sluice
pumps from unit 1 to 6, Booster pumps, Secondary CW
pump and AWR system pumps

# C2 Pricing Data

# **C2.1 Pricing assumptions**

The Price List is in two parts. Part 1 is for work described in the Service Information not requiring the *Employer* to issue a Task Order. Part 2 is for work to be carried out within a stated period of time on a task by Task basis and instructed by Task Order. The *service* may comprise work under Part 1 only or Part 2 only or a mix of both.

Entries in the first four columns of Part 1 of the Price List are made either by the *Employer* or the tenderer. Entries in the first four columns of Part 2 of the Price List would normally be made by the *Employer* as the Party most likely to know the kind of work which will be instructed by the issue of Task Orders. The tenderer then enters a rate for each item and multiplies it by the Expected quantity to produce the Price to be entered in the final column.

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

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters a rate for each item and multiplies it by the Expected quantity to produce the Price, to be entered in the final column.

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

The rates and Prices entered for each item includes for all work and other things necessary to complete the item.

# PART 2: PRICING DATA TSC3 Option A

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

# C2.1 Pricing assumptions: Option A

#### The conditions of contract

## How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract, June 2005 (TSC3) core clauses and Option A states:

# Identified 11 and defined 11.2 terms

(12) The Price List is the *price list* unless later changed in accordance with this contract.

(17) The Price for Services Provided to Date is the total of

- the Price for each lump sum item in the Price List which the Contractor has completed and
- where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the Contractor has completed by the rate.

(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

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

#### **Function of the Price List**

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

## Link to the Contractor's plan

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

# Preparing the *price list*

It will be assumed that the tendering contractor has read Pages 14, 15 and 73 of the TSC3 Guidance Notes before preparing the *price list*. Items in the *price list* may have been inserted by the *Employer* and the tendering contractor should insert any additional items which he considers necessary. Whichever party provides the items in the *price list* the total of the Prices is assumed to be fully inclusive of everything necessary to Provide the Service as described at the time of entering into this contract.

- 1 As the *Contractor* has an obligation to correct Defects (core clause 42.1) and there is no compensation event for this unless the Defect was due to an *Employer's* risk, the lump sum Prices and rates must also include for the correction of Defects.
- 2 If the *Contractor* has decided not to identify a particular item in the *price list* at the time of tender the cost to the *Contractor* of doing the work must be included in, or spread across, the other Prices and rates in the *price list* in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.
- 3 There is no adjustment to lump sum prices in the *price list* if the amount, or quantity, of work within that lump sum item of service later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event. See Clause 60.1.
- 4 Hence the Prices and rates tendered by the *Contractor* in the *price list* 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.
- 5 The Contractor does not have to allow in his Prices and rates for matters that may arise as a result of a compensation event. It should be noted that the list of compensation events includes those arising as a result of an *Employer's* risk event listed in core clause 80.1.

## Format of the price list

(From page 73 of the TSC3 Guidance Notes)

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

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

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

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

# C2.2 the price list

C2.2 the price	Description	3yr cycle QTY	Price per unit	Total price
list <b>Item</b>	•		-	-
1.		Model	14/12 DSc	
1.1	Collect pump	72		
1.2	Replace new	4		
	impeller			
1.3	Strip	72		
1.4	Sandblast	72		
1.5	Undercoat	72		
	casing			
1.6	chemical clean	72		
1.7	Apply Turbo	72		
<b>A1</b> 1/	ceramic coating			
New Items	D 1 201	1		
1.8	Replace with new Shaft	4		
1.9	Replace with	8		
	new Shaft			
	sleeves 316			
4.40	brass	40		
1.10	Replace with	16		
	new Shaft lock			
1.11	nuts  Replace with	8		
1.11	new Bearings	0		
1.12	Replace with	16		
1112	new Machine			
	bearings covers			
	de and NDE			
1.13	Replace with	8		
	new Install			
	Bearing isolators			
1.14	Replace with	8		
	new Wear			
	rings(2off)			
1.15	Replace with	8		
	new skim			
	impellor wear			
1.16	rings	4		
1.17	Balance impeller Replace with	16		
1.17	new Dowel	10		
	bearing			
	assembles with			
	pins			
1.18	Replace with	72		
	new blank or			

	NDE cover					
1.19	Replace with	288				
1.13	new Repack	200				
1.20	stuffing boxes	72				
1.20	supply complete QCP	12				
1.21	Replace with	288				
	new Grease					
	bearings					
1.22	Replace with	288				
	new Fit self					
	lubricators					
1.23	Replace with	1152				
	new threaded					
	studs on stuffing					
	box					
1.24	Replace with	72				
	new all pump					
	cover bolts with					
	new ones					
	including gasket					
1.25	Replace with	72				
	new assemble					
	pump	<u> </u>				
1.26	Replace with	72				
4.07	new final coat	70				
1.27	deliver on site	72	model f	_ 12/14 DM	_	
2.	Collect numn	72	modei			
2.2	Collect pump Impeller	72				
2.3	Strip	72				
2.4	Sandblast	72				
2.5	Undercoat	72				
2.3	casing	12				
2.6	chemical clean	72				
2.7	Apply Turbo	72				
2.1	ceramic coating	'-				
3		_1	Model	18/20 BL	E	1
3.1	Collect pump	36				
3.2	Replace with	36				
	new Impeller					
3.3	Strip	36				
3.4	Sandblast	36				
3.5	Undercoat	36				
	casing					
3.6	chemical clean	36				
3.7	Apply Turbo	36				
	ceramic coating					
New items		Γ_	Т			
3.8	Replace with	2				
	new Shaft					

0.0	Danila a a 20	4		
3.9	Replace with	4		
	new Shaft			
	sleeves 316			
	brass			
3.10	Replace with	8		
	new Shaft lock			
	nuts			
3.11	Replace with	6		
3.11	•	U		
0.40	new Bearings	0		
3.12	Replace with	8		
	new Machine			
	bearings covers			
	de and NDE			
3.13	Replace with	4		
	new Install			
	Bearing isolators			
3.14	Replace with	4		
	new Wear			
	rings(2off)			
3.15	Replace with	2		
3.13	new skim	2		
	impellor wear			
0.40	rings	0		
3.16	Balance impeller	2		
3.17	Replace with	8		
	new Dowel			
	bearing			
	assembles with			
	pins			
3.18	Replace with	36		
	new blank or			
	NDE cover			
3.19	Replace with	144		
	new Repack			
	stuffing boxes			
3.20	Replace with	36		
3.20	new supply	30		
	complete QCP			
4	complete QCF	Model 10/12	) EME	
4.1	Collect pump	72	<u> </u>	
4.1		72		
4.2	Replace with	12		
4.2	new Impeller	70		
4.3	Strip	72		
4.4	Sandblast	72		
4.5	Undercoat	72		
	casing			
4.6	chemical clean	72		
4.7	Apply Turbo	72		
	ceramic coating			
New items			•	
4.8	Shaft	4		
4.9	Shaft sleeves	8		
1.0	Jilan Sicovos		<u> </u>	

	316 brass		
4.10	Shaft lock nuts	16	
4.11	Replace with	4	
	new Bearings		
4.12	Replace with	8	
	new Machine		
	bearings covers		
	de and NDE		
4.13	Replace with	288	
	new Install		
	Bearing isolators		
4.14	Replace with	8	
	new Wear		
	rings(2off)		
4.15	Replace with	4	
	new skim		
	impellor wear		
	rings		
4.16	Balance impeller	72	
4.17	Replace with	16	
	new Dowel		
	bearing		
	assembles with		
4.40	pins		
4.18	Replace with	72	
	new blank or		
4.40	NDE cover	000	
4.19	Replace with	288	
	new Repack		
4.00	stuffing boxes	70	
4.20	Replace with	72	
	new supply		
4.21	complete QCP	72	
4.21	Replace with new Grease	12	
	bearings with		
	Ceram		
4.22	Replace with	288	
	new Fit		
	lubricators		
4.23	Replace with	1152	
	new threaded	· <del>-</del>	
	studs on stuffing		
	box		
4.24	Replace with	72	
	new Replace all		
	pump cover		
	bolts with new		
	ones including		
	gasket		
4.25	assemble pump	72	
4.26	final coat	72	

4.27	deliver on site	72	
7.21	Collect pump	72	
	Collect pullip	12	
5			
5.1		BDM 14/16	
5.2	Replace with	72	
0.2	new Impeller	12	
5.3	Strip	72	
5.4	Sandblast	72	
5.5	Undercoat	72	
0.0	casing	12	
5.6	chemical clean	72	
5.7	Apply Turbo	72	
	ceramic coating		
New items	<u> </u>		<b>-</b>
5.8	Replace with	4	
	new Shaft		
5.9	Replace with	8	
	new Shaft		
	sleeves 316		
	brass		
5.10	Replace with	16	
	new Shaft lock		
	nuts		
5.11	Replace with	4	
	new Bearings	_	
5.12	Replace with	8	
	new Machine		
	bearings		
	covers de and		
F 42	NDE Doplose with	200	
5.13	Replace with new Install	288	
	Bearing		
	isolators		
5.14	Replace with	8	
0.14	new Wear	O .	
	rings(2off)		
5.15	Replace with	4	
	new skim		
	impellor wear		
	rings		
5.16	Balance	72	
	impeller		
5.17	Replace with	16	
	new Dowel		
	bearing		
	assembles with		
	pins		
5.18	Replace with	72	
	new Replace		
	with new blank		

	or NDE cover		
5.19	Replace with new Repack Replace with new stuffing boxes	288	
5.20	supply complete QCP	72	
5.21	Replace with new Grease bearings with ceran	72	
5.22	Replace with new Fit lubricators	288	
5.23	Replace with new replace threaded studs on stuffing box	1152	
5.24	Replace with new all pump cover bolts with new ones including gasket	72	
5.25	assemble pump	72	
5.26	final coat	72	
5.27	deliver on site	72	

NB
RATES INCLUDE ALL RELEVANT COST I.E. OVERHEADS, TRANSPORT AND LABOUR COST AND
BONUSES.

CONTRACTOR:		
PRINT NAME	SIGNATURE	DATE

## C3: Scope of Work

### C3.1 Service Information

# 1. Description of the service

The contractor collects the pump in Duvha power station within 24hours after official order is given. The collection arrangements will be made and confirmed through email or telephonically prior collection of the pump. The contractor will strip the pump with 24 hours day after collection.

Contractor will call Eskom representative during striping of the pump to confirm and asses the pump components and decides which components to be re-used or replaced.

Task order will be made as per agreed scope. QCP documents will be send by contractor to Eskom representative to agree on the QCP only then contractor can continue with the repairs of the pump. Contractor is given three (3) days to complete assemble of the pump. QCP interventions should be adhered to by both contractor and Eskom representative. During delivery of the pump. Premature filer of the running pumps contractor need to collect the pump within 24hour after notification and defect need to be rectified within 48 hours on the cost of contractor.

1. Description of the *service* The works consists of inspection, maintenance and refurbishment/overhaul of sluice pumps from unit 1 to 6, Booster pumps, Secondary CW pumps and AWR system pumps

## 3.2. SPECIFICATION

Testing of bearing assemble for temperatures and bearing vibrations must be done by an Authorised person and the certificate be issued on delivery according to QA and QC document

# 3.3 Contract Quality Plan

The supplier shall require sub-suppliers to submit project quality plans (PQPs)/ contract quality

plans (CQPs) and associated documentation in accordance with the requirements of project quality

Management system processes applicable to the sub-supplier's scope of work.

The supplier shall, where applicable, based on scope of work criticality, ensure that procurement

documents clearly and unambiguously require sub-supplier submission of a sub-supplier CQP for

supplier and Eskom review.

The supplier shall ensure that sub-supplier CQPs are developed and implemented in accordance

with the ISO 10005 Quality Management System Guidelines for Quality Plans. In addition to the

elements specified in ISO 10005, the supplier's and/ or sub-suppliers' CQPs shall include the

# following: see at QM58 3.3 under CQP

# Scope of work

#### **Standards**

All maintenance standards for the centrifugal pumps shall be subject to the latest amendments and editions of the following standard specifications:-

SANS 9096-1: 1994 : Testing of welders, where applicable to the type of welding required

BS 292 Part 1: 1987 : Dimensions of ball bearings, cylindrical and spherical roller bearings

SANS 1044-3 : Welding Part 3: The fusion of steel (including stainless steel): Tests for the

approval of welding procedures

SANS 10044-4 : Welding Part 4: The fusion welding of steel (including austenitic stainless steel):

Tests for the approval of welders working where weld procedure approval is not

required.

SANS 10064 : The preparation of steel surfaces for coating

SANS 10341 : Installation and maintenance of bearings – General guidelines

SANS 1700-5-9 : Fasteners Part 5: General requirements & material properties Section 8 : Corrosion resistant stainless steel fasteners-Bolts, Screws & Studs

SANS 1700-5-10 : Fasteners Part 5: General requirements & material properties Section 8: Corrosion

resistant stainless steel fasteners-Nuts

BS EN 734:1995 : Pumps and pump units for liquids. Common safety requirements
BS EN 12162:2001 : Liquid pumps. Safety requirements. Procedure for hydrostatic testing

SANS 1123 : Pipe Flanges BS 5316 Part 2 : Pump test codes

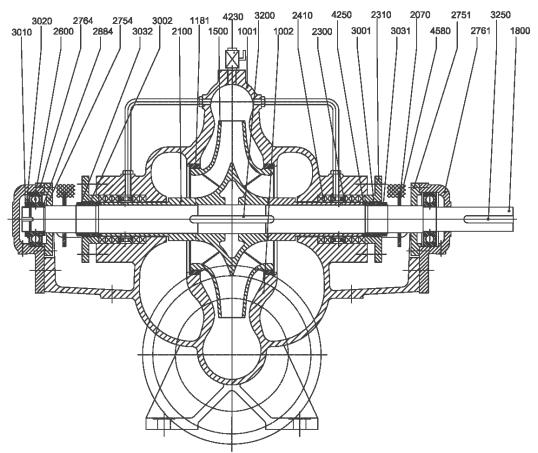


Figure 1: LE & ME Split Casing Pumps

- 13 - 1 - 2 - 1 - 2 - 1 - 2 - 1 - 2 - 1 - 2 - 2					
Ref	Description	Ref	Description		

4580	Safety guard	2754	Bearing end cover (N.D.E.)			
4250	"O" ring	2751	Bearing end cover (D.E.)			
4230	Air cock	2600	Deep groove ball bearing			
3250	Coupling key	2410	Gland packing			
3200	Impeller key	2310	Gland			
3032	Sleeve nut (R.H.)	2300	Lantern ring			
3031	Sleeve nut (L.H.)	2100	Shafts Sleeve			
3020	Locking washer	2070	Water deflector			
3010	Lock Nut	1800	Shaft			
3002	Cowl Nut (R.H.)	1500	Impeller			
3001	Cowl Nut (L.H.)	1181	Neck ring			
2884	Thrust collar	1002	Casing-bottom half			
2764	Bearing housing (N.D.E.)	1001	Casing-Top half			
2761	Bearing housing (D.E.)					

Sluice Pump manufacturing tolerances Unit 4-6

COMPONENT	MANUFACTURE SPEC
Impeller diameter	625mm
Neck ring to casing clearance	0.1mm
Gland /Shaft sleeve (external wear)	0.65mm Max
Shaft to shaft sleeve clearance	0.1mm
Thrower to shaft fit	Slide
Wear ring to impeller inlet eye clearance	0.25 to 0.35mm (max per side)
Shaft axial float	0.1mm max
Pump gasket	0.3mm
Neck bush to shaft sleeve	0.25mm per side

# Sluice Pump manufacturing tolerances Unit 1-3

COMPONENT	MANUFACTURE SPEC
Impeller diameter	622mm
Neck ring to casing clearance	0.1mm
Gland /Shaft sleeve	0.7 – 0.8 mm
Shaft to shaft sleeve clearance	0.1mm
Thrower to shaft fit	Slide
Wear ring to impeller inlet eye clearance	0.25 to 0.35mm (max per side)
Shaft axial float	0.1mm max
Pump gasket	0.3mm
Wearing/impeller	0.5 – 0.55mm

Pump Model	Bearing DE	Bearing NDE	Bearing LUB	Shaft Diameter at CPLG mm	Gland packing size	Stuffing box No. of packing rings
MATT + PATT 12/14 DME	Ball: SK F6314-Deep groove If old renew with like by like	Ball: SKF 6314- deep groove If old renew with like by like	GREASE	65	20	7
MATT + PATT 10/12 EME	Ball: SKF 6316 – If old renew with like by like. Deep groove (steel cage)	Ball: SKF 6316 — If old renew with like by like. Angular contact x-type (back to back)	GREASE	75	19	7
MATT + PATT 18/20 BLE	Ball: SKF 6316 — If old renew with like by like. Deep groove (steel cage)	Ball: SKF 6316 — If old renew with like by like Angular contact x-type (back to back)	GREASE	75	19	7
APE 14/12DESC	Cylindrical	Deep groove	GREASE	80	14	8
APE 16/14 BDM	renew with like by like	renew with like by like	renew with like by like	renew with like by like	renew with like by like	renew with like by like

**Note:** If welding has to be conducted the supply must inform the client of such work and it needs to conform to Eskom Welding Book. The requirements needed from the contractor prior to welding commencing are as follows:

- Welding Procedure Specification WPS
- Welding Procedure Qualification Record (WPQR)
- Welder qualification record ( WQR)
- Quality Control plan- detailed
- NDT personnel qualifications
- NDT procedures

These are the minimum requirements irrespective if the contractor subcontracting this work.

## Tests at the Site of the Works

The Engineer may require that site tests are performed to verify performance figures guarantee by the Contractor. Flow rate, total head and power input to the pump/motor units shall be determined, as accurate as Site conditions permit, for one or more points on the pump curves close to the specified duty point. The Contractor shall provide suitable instruments with recent calibration certificates. Should these measured and

calculated quantities differ from those guaranteed by more than the tolerances allowed by BS 5316 Part 1 - re-testing of the unit at any testing facility, or the recalibration of the measuring instruments. Should the subsequent test results still fall outside the allowable tolerances, all costs shall be borne by the Contractor. In the event of the subsequent test being successful, costs shall be borne by the Employer as per the contract.

#### **COLOUR CODES**

The standard final colour codes for equipment maintained under this Contract shall be in accordance or concurrent to the original colour code supplied before being worked on.

## PUMP HANDLING, TRANSPORT AND STORAGE

In order to prevent damage or serious injury when handling & transporting the product, the following points must be observed and considered:

- -Handling & transport work may only be carried out by, qualified personnel. The safety instructions must be followed at all times.
- -Only suitable lifting gear and load carrying equipment with valid test certificates and adequate lifting capacity for the loads involved (such as belts/wire ropes/slings) should be used for lifting & transporting the product. If chains are used, they should be secured against slipping along with protective cover to prevent damage to the product, paint and/or injury to personnel.
- -Only the appropriate and approved fastening devices, transportation means and lifting equipment may be used. These must have sufficient load bearing capacity to ensure that the product can be transported safely. This normally precludes the possibility of damage occurring during transport.
- -Storage: the equipment must have adequate protection for short-term storage in a covered, dry and ventilated location after maintenance has been done. Place the product on firm foundation and secure it against falling. Any suction or delivery pressure connections on products should be closed tightly before storage to prevent impurities. The machine must be protected from direct sunlight, heat, dust, and frost. The rotors or propellers must be turned at regular intervals. This prevents the bearing from locking and the film of lubricant on the mechanical shaft seal is renewed.

Note: Products, which are delivered to the plant, must be clean and tidy. In this context, clean means that impurities have been removed and decontaminated if it has been used with materials, which are hazardous to health and descaled.

## **LUBRICATION**

MANUFACTURE	GREASE BALL AND ROLLER BEARINGS
Alexander Duckham Co. Ltd.	Duckhams LB 15
Esso Petroleum Co. Ltd.	T.S.D. 807, (U.K.) Esoo multi-Purpose
	Grease H. (0verseas)
Germ Lubricants Ltd	Germac Neo Astra
Mobile Companies throughout the world	Mobil Grease No.3
National Benzole Co. Ltd	MPG - 1
Power Petroleum Co. Ltd	BP Energrease LS3
Regent Oil Co. Ltd.	Caltex Multifac 2
Shell Companies throughout the world	Shell Nerita Grease 3 / or Shell Alvania Grease 3
Sternol Ltd	Stemoline LHT
Valvoline Oil Co	Volvine No. G.LI. Ball & Roller Bearing grease
Wakefield-Dick Industrial Oils Ltd	Spheerol A.P. 3

		M6	M8	M10	M12	M16	M20	M24	M27	M30	M33	M36	M39
5.6	N.m	4.3	10.5	21	36	88	171	295	435	560	800	1030	1340
8.8	N.m	9.9	24	48	83	200	390	675	995	1350	1830	2360	3050
10.9	N.m	14	34	67	117	285	550	960	1400	1900	2580	3310	4249
12.9	N.m	16.5	40	81	140	340	650	1140	1660	2280	3090	3880	5150

# **GENERAL PUMP SPECIFICATION**

3.1.1 Sluice Pumps Unit 4-6  ☐ Manufacturer: Matter + Platter(Pty)Ltd  ☐ Model: 10/12 EME (Impeller size = 625mm)  ☐ Capacity:1020m3/hr  ☐ Discharge Head:130m  ☐ Pump Speed:1480rpm  ☐ Discharge pressure: 1500 kPa
3.1.2 Sluice Pumps Unit 1-3 (P&ID 057/44374)  ☐ Manufacturer: APE Africa (Pty)Ltd  ☐ Model: 14/12 DESC (Impeller size = 622 mm)  ☐ Capacity: 1020 m3/hr  ☐ Discharge Head: 115 m  ☐ Pump Speed: 1480 rpm  ☐ Discharge pressure: 1500 kPa
3.1.3 AWR Pumps  ☐ Manufacturer: Mather + Platt (Pty)Ltd  ☐ Pump model: 12/14 DME (Impeller Diameter: 526 mm  ☐ Capacity: 22.5 m3/min  ☐ Discharge Head: 91.4 m  ☐ Pump Speed: 1480 rpm  ☐ Coupling size: Pin type, TB 4040, Max bore 75  ☐ Bearing: ball; 6314, angular contact
3.1.4 SWB Pumps  Manufacturer: Mather + Platt (Pty)Ltd Pump model: 18/20 BLE (Impeller Diameter:495 mm) Capacity: 55.3 m3/min Discharge Head: 22 m Pump Speed: 980 rpm Coupling size: Pin type, TB 4040, Max bore 75 Bearing: ball; 6314, angular contact
3.1.5 Secondary CW Pump  ☐ Manufacture : APE Africa Pty (LTD)  ☐ Pump, Centrifugal: Size 400 x 350mm  ☐ Capacity: 1220M3/hr.  ☐ Total Head: 40m  ☐ NPSH: 4,5m  ☐ Pump Speed: 1480rpm

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☐ John Crane Mechanical Seals

☐ Impeller Diameter: 381mm

□ Serial No:: P0571, MODEL NO: 14/16 BDM

PART NO: TA402006K0

1.1 Employer's objectives and purpose of the works1) The Employer's objective is to have a stable and reliable installation of sluice pumps and motors with smooth operations and acceptable levels of vibration

# Interpretation and terminology

The following abbreviations are used in this Works Information: Abbreviation	Meaning given to the abbreviation
AFC	Approved for construction
QCP	Quality Control Plan
cw	Cooling Water
DHP	Dust Handling Plant
FFP	Fabric Filter Plant
AWR	Ash water Return
PTW	Permit To Work
PPE	Personal protective
	Equipment
NCR	Non Conformance Report
cw	Cooling water
OEM	Original Equipment
	Manufacturer
AFC	Approved for construction
QCP	Quality Control Plan
WI	Works Information

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Only	/ use	the	SABS	certified	machine
	use	uic		Certifica	machine

#### 3. Constraints on how the Contractor Provides the Service

There should always be a permit work before the contractor commences works. Eskom will take a permit on behalf of the contractor prior to commencement of works.

## 3.1 Meetings

Kick of meeting is required before contractor can start working. Contractor or project manager can call the meeting as when required.

## 3.2 Use of standard forms

THE SUPPLIER OR THE EMPLOYER GIVES AN EARLY WARNING BY NOTIFYING THE OTHER AS SOON AS EITHER BECOMES AWARE OF ANY MATTER WHICH COULD INCREASE THE TOTAL OF THE PRICES, DELAY COMPLETION OR IMPAIR THE USEFULNESS OF THE SERVICES TO THE EMPLOYER. THE SUPPLIER AND THE EMPLOYER CO-OPERATE IN MAKING AND CONSIDERING PROPOSALS FOR HOW THE EFFECT OF EACH MATTER WHICH HAS BEEN NOTIFIED AS AN EARLY WARNING CAN BE AVOIDED OR REDUCED.

## 3.3 Invoicing and payment

In terms of core clause 50.1. Assessing the amount due. The *service manager* assesses the amount due. Contractor invoices as per Task order assessed by service manager. \_\_\_

The Contractor includes the following information on each tax invoice:

- Name and address of the *Contractor*
- The contract number and title;
- Contractor's VAT registration number;
- The *Employer's* VAT registration number
- The total of
  - The Price for each lump sum item in the Price List or Task Order which the Contractor has completed;
  - Where a quantity is stated for an item in the Price List or Task Order, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.
- Other amounts to be paid to the Contractor,
- Less amounts to be paid by or retained from the Contractor,

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- The change in the amount due since the previous payment being the invoiced amount excluding VAT, the VAT and including VAT;
- (add other as required)

The *Contractor* attaches the detail assessment of all work done for each item in the Price List to each tax invoice showing

- the Price for each lump sum item in the Price List or Task Order which the Contractor has completed and
- where a quantity is stated for an item in the Price List or Task Order, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.

#### 3.4 Records of Defined Cost

N/A

3.5 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)				
N/A.				

The Contractor shall keep accurate records and provide the Employer with reports on the Contractor's actual delivery against the above stated ASGI-SA criteria. [Elaborate on access to and format of records and frequency of submission etc.]

The *Contractor*'s failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

# 3.6 BBBEE and preferencing scheme

N/A

## 4. Requirements for the plan

N/A

# 5. Services and other things provided by the Employer

# **ASSESSING THE AMOUNT DUE**

In terms of core clause 50.1. Assessing the amount due. The *service manager* assesses the amount due. Contractor invoices as per Task order assessed by service manager.

PART C3: SCOPE OF WORK

THE INVOICE INCLUDES THE DETAILS STATED IN T	HE SCOPE TO SHOW HOW THE AMOU	NT DUE HAS
BEEN ASSESSED.		

#### THE SERVICES.

THE AMOUNT DUE IS THE PRICE FOR SERVICES PROVIDED TO DATE, PLUS OTHER AMOUNTS TO BE PAID TO THE SUPPLIER LESS AMOUNTS TO BE PAID BY OR RETAINED FROM THE SUPPLIER. ANY VALUE ADDED OR SALES TAX WHICH THE LAW REQUIRES THE EMPLOYER TO PAY TO THE SUPPLIER IS INCLUDED IN THE AMOUNT DUE.

THE SUPPLIER PAYS DELAY DAMAGES FOR EACH DAY FROM THE COMPLETION DATE UNTIL COMPLETION.

#### **PAYMENT**

THE *EMPLOYER* PAYS THE *SUPPLIER* WITHIN 30 DAYS AFTER RECEIPT OF AN INVOICE FROM THE *SUPPLIER*. THE FIRST PAYMENT IS THE AMOUNT DUE. OTHER PAYMENTS ARE THE CHANGE IN THE AMOUNT DUE SINCE THE LAST PAYMENT.

A PAYMENT IS MADE BY THE SUPPLIER TO THE EMPLOYER IF THE CHANGE REDUCES THE AMOUNT DUE. OTHER PAYMENTS ARE MADE BY THE EMPLOYER TO THE SUPPLIER.

IF THE *EMPLOYER* DOES NOT AGREE WITH AN INVOICE SUBMITTED BY THE *SUPPLIER*, HE NOTIFIES THE *SUPPLIER* OF THE REASON FOR HIS DISAGREEMENT BEFORE THE PAYMENT IS DUE. HE PAYS ANY AGREED PART OF THE INVOICE.

# **Eskom Life-saving Rules**

Life-saving rules have been developed that will apply to all Eskom employees, agents, consultants and contractors.

- Rule 1: Open, Isolate, Test, Earth, Bond, and/or Insulate before touch that is any plant operating above 1 000 V.
- Rule 2: Hook up at heights no person may work at a height where there is a risk of falling.
- Rule 3: Buckle up no person may drive any vehicle on Eskom business and/or on Eskom premises unless the driver and all passengers are wearing seat belts.
- Rule 4: Be sober (no person is allowed to work under the influence of drugs and alcohol.
- Rule 5: Use a permit to work where an authorization limitation exists, no person shall work without the required permit to work.
- Rule 6: Wear correct PPE.
- Rule 7: Report all injuries before end of shift.

# 6. Property affected by the service

N/A

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# Task Order

Task Order form for use when work within the <i>service</i> is instructed to be carried out within a stated period of time on a Task by Task basis				
Task Order No.	[•]	service	.[•]	
I propose to instruct	you to carry out the followin	g task:		
Description	[•]	C .		
Starting date	[•]			
Completion Date	[•]			
Delay damages per week	[•]			
Please submit your	price and programme propo	sals below.		
Signed:		Date		
(for	Employer)			
Total of Prices for ite	ems of work on the Price d)	R		
Total of Prices for items of work not on the Price List (details attached).		R		
Total of the Prices for this Task Order		R		
The programme for	the Task is		[ref] (attached)	
Signed:		Date	,	
(for	Contractor)			

DOCUMENT C2.1 PAGE 46 PRICING DATA

CONTRAC	CT NUMBER	
LLUNIRAL		

I accept the above price and programme and instruct you to carry out the Task

Signed: Date:

(for *Employer*)