

# NEC3 Supply Contract (SC3)

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

and		
	(Reg No.	

for SUPPLY AND DELIVERY OF UNIT 5 ELECTROSTATIC PRECIPITATOR (ESP) MECHANICAL SPARES ON AN "AS AND WHEN REQUIRED BASIS" AT KRIEL POWER STATION FOR A PERIOD OF 4 MONTHS

Contents:		No of pages
Part C1	Agreements & Contract Data	20
Part C2	Pricing Data	9
Part C3	Scope of Work	25

**ENQUIRY No: MPKRI11062PS** 

## PART C1: AGREEMENTS & CONTRACT DATA

Contents:		No of pages
C1.1	Form of Offer and Acceptance	3
C1.2a	Contract Data provided by the <i>Purchaser</i>	15
C1.2b	Contract Data provided by the Supplier	2

## C1.1 Form of Offer & Acceptance

#### Offer

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

SUPPLY AND DELIVERY OF UNIT 5 ELECTROSTATIC PRECIPITATOR (ESP) MECHANICAL SPARES ON AN "AS AND WHEN REQUIRED BASIS" AT KRIEL POWER STATION FOR A PERIOD OF 4 MONTHS

The tenderer, identified in the Offer signature block, has

either	examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.	
or	examined the draft contract as listed in the Acceptance section and agreed to provide this Offer.	

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 *Supplier* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

The offered total of the Prices exclusive of VAT is
Value Added Tax @ 15% is
The offered total of the amount due inclusive of VAT is <sup>1</sup>
(in words)

This Offer may be accepted by the Purchaser 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 *Supplier* in the *conditions of contract* identified in the Contract Data.

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

PART C1: AGREEMENTS & CONTRACT DATA

<sup>&</sup>lt;sup>1</sup> This total is required by the *Purchaser* 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 Purchaser identified below accepts the tenderer's Offer. In consideration thereof, the Purchaser shall pay the Supplier 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 Purchaser 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: Goods Information including Supply Requirements

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 Purchaser 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 Purchaser's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

Signature(s)			
Name(s)			
Capacity			
for the Purchaser	Eskom Holdings SOC Ltd, Megawatt Park, Maxwell Drive, Sandton, Johannesburg, 2199		
Name &	(Insert name and address of organisation)		
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 *Purchaser* prior to contract award Note:

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

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

By the duly authorised representatives signing this Schedule of Deviations below, the Purchaser 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 Purchaser 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 Purchaser
Signature		
Name		
Capacity		
On behalf of	(Insert name and address of organisation)	Eskom Holdings SOC Ltd, Megawatt Park, Maxwell Drive, Sandton, Johannesburg, 2199
Name & signature of witness		
Date		

# C1.2 SC3 Contract Data

## Part one - Data provided by the Purchaser

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)

- 1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
- 2. Some SC3 options are always selected by Eskom Holdings SOC Ltd. The remaining SC3 options are identified by shading in the left hand column. In the event that the option is not required select and delete the whole row. Where the following symbol is used "[•]" data is required to be inserted relevant to the specific option selected.]

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

Clause	Statement	Data	
1	General		
	The conditions of contract are the core clauses and the clauses for Options		
		X2	Changes in the law
		X7:	Delay damages
		Z:	Additional conditions of contract
	of the NEC3 Supply Contract (April 2013) <sup>2</sup>		ecember 2009 edition is to be used delete April 2013 lace by December 2013)
10.1	The Purchaser 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		tered office at Megawatt Park, Maxwell Sandton, Johannesburg
	Tel No.	ТВА	
	Fax No.	N/A	
10.1	The Supply Manager is (name):	ТВА	
	Address	Kriel F Privat Kriel 2	n Holdings SOC Ltd Power Station e Bag X5009 2271 eskom.co.za
	Tel	ТВА	

<sup>&</sup>lt;sup>2</sup> Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902, www.ecs.co.za.

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	Fax	ТВА
	e-mail	ТВА
11.2(13)	The goods are	Electrostatic Precipitator (ESP) Mechanical Spares
11.2(13)	The services are	Supply and Delivery of Electrostatic Precipitator (ESP) Mechanical Spares As and When required
11.2(14)	The following matters will be included in the Risk Register	<ul> <li>Scope Creep</li> <li>Poor Quality and Workmanship of Material</li> <li>Delays in Spares Delivery</li> <li>Violation of SHE Legislative requirements</li> <li>Access to Plant</li> <li>Industrial Action</li> <li>Transportation Damages</li> <li>Matters notified as Early Warnings</li> </ul>
11.2(15)	The Goods Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
11.2(15)	The Supply Requirements as part of the Goods Information is in	Annexure A to this Contract Data
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 <i>period for reply</i> is	<ul> <li>Non-Supply related communication is 3 working days and</li> <li>Supply/Emergency related communication should be within 24 hours</li> </ul>
2	The Supplier's main responsibilities	Data required by this section of the core clauses is provided by the <i>Supplier</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.
3	Time	
30.1	The starting date is.	1 May 2024
30.1	The delivery date of the goods and services is:	goods and services delivery date
		Supply And Delivery of ESP Mechanical Spares as and when required programme per order
30.2	The Supplier does not bring the goods to the Delivery Place more than one week before the Delivery Date.	Not Applicable
31.1	The Supplier is to submit a first	

	programme for acceptance within	One (1) week of the Contract Date.
32.2	The Supplier submits revised programmes at intervals no longer than	
	g	One (1) week.
4	Testing and defects	
42	The defects date is	Two (2) weeks after Delivery.
43.2	The defect correction period is	One (1) week
	except that the defect correction period for	N/A
	and the defect correction period for	N/A
42.2	The defects access period is	Two (2) days
	except that the defect access period for	N/A
	and the defect access period for	N/A
5	Payment	
50.1	The assessment interval is	25 <sup>th</sup> 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 (4) weeks after receipt of invoice.
51.4	The interest rate is	the publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by the Standard Bank of South Africa 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
6	Compensation events	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.  There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.

7	Title	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
8	Risks, liabilities, indemnities and insurance	
80.1	These are additional Purchaser's risks	Additional risks will be managed by the parties as they arise.
88.1	The Supplier's liability to the Purchaser for indirect or consequential loss, including loss of profit, revenue and goodwill is limited to	R0.0 (zero Rand)
88.2	For any one event, the Supplier's liability to the Purchaser for loss of or damage to the Purchaser's property is limited to	(1) for the <i>Purchaser's</i> existing and surrounding property in the care, custody and control of the <i>Supplier</i> the amount of the deductible (first amount payable) relevant to the event and
		(2) for all other existing <i>Purchaser's</i> property the applicable deductible as at contract date (first amount deductible) namely:
		<ol> <li>R15 million (fifteen million Rand) for Generation Division property;</li> <li>R7.5 million (seven million five hundred thousand Rand) for Transmission Division property and;</li> <li>R1 million (one million Rand) for Distribution Division and all other Purchaser's property</li> </ol>
88.3	The Supplier's liability for Defects due to his design which are not notified before the last defects date is limited to:	Replacement value of the spares
88.4	The Supplier's total liability to the Purchaser, for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	Replacement value of the spares
88.5	The end of liability date is	12 months after Delivery of the whole of the <i>goods</i> and <i>services</i> .
9	Termination and dispute resolution	
94.1	The <i>Adjudicator</i> is	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 <a href="https://www.ice-sa.org.za">www.ice-sa.org.za</a> ). 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	[•]	
94.2(3)	The Adjudicator nominating body is:	South African Instit	E-SA, a Division of the aution of Civil Engineering, dy (See www.ice-sa.org.za)
94.4(2)	The tribunal is:	arbitration	
94.4(5)	The arbitration procedure is	Arbitrations publish	Rules for the Conduct of ned by The Association of rn Africa) or its successor
94.4(5)	The place where arbitration is to be held is	South Africa	
	The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is		e time being or his nominee of Arbitrators (Southern ssor body.
10	Data for Option clauses		
X2	Changes in the law		
X2.1	A change in the law of		Africa is a compensation ter the Contract Date
Х7	Delay damages		
X7.1	Delay damages for Delivery are	Late delivery of	amount per day
		ESP Mechanical Spares	0.25% per day of the total of the prices at contract date
	The total delay damages payable by the		25% of the total of the
	Supplier does not exceed:		prices at contract date.

## Z1 Cession delegation and assignment

- Z1.1 The *Supplier* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Purchaser*.
- Z1.2 Notwithstanding the above, the *Purchaser* may on written notice to the *Supplier* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its

present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

#### Z2 Joint ventures

- Z2.1 If the *Supplier* 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 *Purchaser* for the performance of this contract.
- Z2.2 Unless already notified to the *Purchaser*, the persons or organisations notify the *Supply Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Supplier* on their behalf.
- Z2.3 The *Supplier* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Purchaser* having been given to the *Supplier* in writing.

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

- Z3.1 Where a change in the *Supplier's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Supplier's* B-BBEE status, the *Supplier* notifies the *Purchaser* within seven days of the change.
- Z3.2 The *Supplier* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Supply Manager* within thirty days of the notification or as otherwise instructed by the *Supply Manager*.
- Z3.3 Where, as a result, the *Supplier's* B-BBEE status has decreased since the Contract Date the *Purchaser* may either re-negotiate this contract or alternatively, terminate the *Supplier's* obligation to Provide the Goods and Services.
- Z3.4 Failure by the *Supplier* to notify the *Purchaser* of a change in its B-BBEE status may constitute a reason for termination. If the *Purchaser* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

### Z4 Confidentiality

- Z4.1 The Supplier 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 Supplier, enters the public domain or to information which was already in the possession of the Supplier at the time of disclosure (evidenced by written records in existence at that time). Should the Supplier disclose information to Others in terms of clause 23.1, the Supplier ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Supplier* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Supply Manager*.
- Z4.3 In the event that the Supplier is, at any time, required by law to disclose any such information which is required to be kept confidential, the Supplier, to the extent permitted by law prior to disclosure, notifies the Purchaser 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 Supplier 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.

Z4.5 The Supplier ensures that all his subcontractors abide by the undertakings in this clause.

## Z5 Waiver and estoppel: Add to core clause 12.3:

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

## Z6 Health, safety and the environment

Z6.1 The *Supplier* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the provision of the *goods* and execution of the *services*.

Without limitation the Supplier.

- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with 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 supply and
- undertakes, in and about the execution of the supply, to comply 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 Supplier's direction and control, likewise observe and comply with the foregoing.
- Z6.2 The Supplier, in and about the execution of the supply, 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 Supplier's direction and control, likewise observe and comply with the foregoing.

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

- Z7.1 Within one week of receiving a payment certificate from the Supply Manager in terms of core clause 51.1, the Supplier provides the Purchaser with a tax invoice in accordance with the Purchaser's procedures stated in the Goods Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z7.2 If the Supplier does not provide a tax invoice in the form and by the time required by this contract, the time by when the Purchaser 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 Purchaser in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z7.3 The *Supplier* (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 *Purchaser*'s VAT number 4740101508 on each invoice he submits for payment.

### Z8 Notifying compensation events

Z8.1 Delete from the last sentence in core clause 61.3 the words, "unless the event arises from the Supply Manager giving an instruction, changing an earlier decision or correcting an assumption".

### Z9 Purchaser's limitation of liability

- Z9.1 The *Purchaser's* liability to the *Supplier* for the *Supplier's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z9.2 The *Supplier*'s entitlement under the indemnity in 83.1 is provided for in 60.1(12) and the *Purchaser*'s liability under the indemnity is limited.

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

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

### Z11 Addition to secondary Option X7 Delay damages (if applicable in this contract)

Z11.1 If the amount due for the Supplier's payment of delay damages reaches the limits stated in this Contract Data for Option X7, the Purchaser may terminate the Supplier's obligation to Provide the Goods and Services using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

#### Z12 Ethics

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

Affected Party	means, a	as the	conte	xt req	uires, an	y party,	, irres	pective	of whet	her it is the	Supplier or
	41							<u> </u>			

a third party, such party's employees, agents, or Subcontractors or Subcontractor's

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

Coercive Action

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

Affected Party to act unlawfully or illegally,

Collusive Action

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

Committing Party

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

employees,

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

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

Fraudulent Action

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

an obligation or incurring an obligation,

Obstructive Action

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

investigation into allegations of Prohibited Action, and

Prohibited Action

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

Z12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

- Z12.2 The *Purchaser* may terminate the *Supplier*'s obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Supplier* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Purchaser* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Purchaser* can terminate the *Supplier*'s obligation to Provide the Services for this reason.
- Z12.3 If the *Purchaser* terminates the *Supplier*'s obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z12.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Purchaser* does not have a contractual bond with the Committing Party, the *Supplier* ensures that the Committing Party co-operates fully with an investigation.

#### Z13Insurance

### Z \_\_13.1 Replace core clause 84 with the following:

#### Insurance cover 84

- 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.
- 84.2 The *Supplier* provides the insurances stated in the Insurance Table A for events which are at the *Supplier*'s risk from the *starting date* until the last *defects date* or a termination certificate has been issued.

### **INSURANCE TABLE A**

Insurance against	Minimum amount of cover or minimum limit
	of indemnity
Loss of or damage to the	The replacement cost where not covered by the
goods, plant and materials	Purchaser's insurance.
	The Purchaser's policy deductible as at
	Contract Date, where covered by the
	Purchaser's insurance.
Liability for loss of or	Loss of or damage to property
damage to property	Purchaser's property
(except the goods, plant	The replacement cost where not covered by the
and materials and	Purchaser's insurance.
equipment) and liability for	The Durchage de policy deductible as at
bodily injury to or death of	The <i>Purchaser</i> 's policy deductible as at
a person (not an employee of the Supplier) caused by	Contract Date, where covered by the Purchaser's insurance.
activity in connection with	Turchaser's insurance.
this contract	Other property
	The replacement cost
	Death of or bodily injury
	The amount required by the applicable law.
Liability for death of or	The amount required by the applicable law
bodily injury to employees	
of the Supplier arising out	
of and in the course of	
their employment in connection with this	
connection with this	
COMME	

## Z\_13.2 Replace core clause 87 with the following:

# Insurance by the *Purchaser*

87

87.1 The *Purchaser* provides the insurances stated in the Insurance Table B

### **INSURANCE TABLE B**

Insurance against or name of policy	Minimum amount of cover or minimu 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	Per the insurance policy document

Business Interruption	
Nuclear Material Damage Terrorism	Per the insurance policy document

### Z14 Nuclear Liability

- Z14.1 The *Purchaser* 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.
- Z14.2 The *Purchaser* is solely responsible for and indemnifies the *Supplier* or any other person against any and all liabilities which the *Supplier* 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 *Supplier* or any other person or the presence of the *Supplier* or that person or any property of the *Supplier* or such person at or in the KNPS or on the KNPS site, without the permission of the *Purchaser* or of a person acting on behalf of the *Purchaser*.
- Z14.3 Subject to clause Z14.4 below, the *Purchaser* 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 *Supplier* or any other person, or the presence of the *Supplier* or that person or any property of the *Supplier* or such person at or in the KNPS or on the KNPS site, without the permission of the *Purchaser* or of a person acting on behalf of the *Purchaser*.
- Z14.4 The *Purchaser* 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.
- Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

#### Z15 Asbestos

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

**AAIA** means approved asbestos inspection authority.

**ACM** means asbestos containing materials.

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

fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the

OEL.

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

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

nose inlet.

Compliance Monitoring

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

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

asbestos and asbestos containing material, equipment and articles.

**OEL** means occupational exposure limit.

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

**Measurements** measurements to verify validity of results.

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

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

asbestos and asbestos containing material, equipment and articles.

Standard means the *Purchaser*'s Asbestos Standard 32-303: Requirements for Safe

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

Containing Material, Equipment and Articles.

**SANAS** means the South African National Accreditation System.

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

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

short term exposures, i.e. 10-minute TWA.

- Z15.1 The *Purchaser* ensures that the Ambient Air in the area where the *Supplier* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.
- Z15.2 Upon written request by the Supplier, the Purchaser 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 Supplier may perform Parallel Measurements and related control measures at the Supplier'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 Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z15.3 The Purchaser manages asbestos and ACM according to the Standard.
- Z15.4 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.
- Z15.5 The Supplier'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.
- Z15.6 The Supplier 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.
- Z15.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Purchaser* at the *Purchaser*'s expense, and conducted in line with South African legislation.

## Annexure A: Supply Requirements

[Notes: The example given in the NEC3 Supply Contract Guidance Notes pages 15 to 20 inclusive is based on Incoterms 2000. However users will probably wish to use Incoterms 2010 which the details below are based on. Users may need to adjust the information to comply with actual requirements. First decide whether Incoterms will be used or not, then delete the arrangement below which does not apply and delete these notes]

## The Supply Requirements for this contract are based on the use of INCOTERMS:

The Supplier supplies the goods in accordance with INCOTERMS 2010<sup>3</sup> as follows:

[Select the group and then term within the group which applies and state the applicable delivery place. Delete all the other groups and this note]

Group	Category	Term	Delivery Place
Е	departure	EXW	
F	main carriage unpaid	FCA, FAS, FOB	
С	main carriage paid	CFR, CIF, CPT, CIP	
D	arrival	DAT, DAP, DDP	

The Parties obligations described in Incoterms for the category and term selected are now incorporated into this contract as part of the Supply Requirements and hence the Goods Information.

The obligations of seller and buyer for the selected Incoterm determine each Party's costs, risks and insurance requirements incidental to the supply and transport of the *goods* from *Supplier* to *Purchaser*.

For each of the thirteen terms, Incoterms set out obligations of the seller (the *Supplier*) in ten paragraphs identified as A1 to A10 and the corresponding obligations of the buyer (the *Purchaser*) in paragraphs B1 to B10. These obligations cover the following subjects:

Α	The Supplier's obligations	В	The Purchaser's obligations
A1	Provision of goods in conformity with contract	B1	Payment of the price
A2	Licences, authorisations and formalities	B2	Licences, authorisations and formalities
А3	Contracts of carriage and insurance	В3	Contracts of carriage and insurance
A4	Delivery	B4	Taking delivery
A5	Transfer of risks	B5	Transfer of risks
A6	Division of costs	B6	Division of costs
A7	Notice to the buyer	B7	Notice to the seller
A8	Proof of delivery, transport document or equivalent electronic message	B8	Proof of delivery, transport document or equivalent electronic message
A9	Checking - packing - marking	В9	Inspection of goods
A10	Other obligations	B10	Other obligations

[Should there be a need to amplify any of the published obligations listed above for the chosen INCOTERM, add them here.]

All other information NOT pertinent to the above is given in the balance of the Goods Information

<sup>&</sup>lt;sup>3</sup> International Chamber of Commerce, Incoterms 2010, Paris, January 2011

## The Supply Requirements for this contract are as follows:

[Use these when INCOTERMS do not apply].

1. The requirements for the supply	Constraints (see clause 11.2 (5))	
are	<ul> <li>No compensation is payable if the Supplier arrives on site without prior arrangement with the Purchaser.</li> <li>All goods shall be delivered to the Kriel Power Station.</li> <li>The Purchaser has the right to refuse acceptance of any consumables which in the opinion of Purchaser, does not meet the requirements specified and will have a detrimental effect on equipment/plant performance.</li> <li>The Supplier ensures that all items to be supplied are to the standard and quality accepted by the Purchaser and ensures that they are suitable for the purpose intended for by the manufacturer.</li> <li>Material Test certificates as well as complete data packs will be submitted with all the ESP Mechanical spares delivered to site.</li> <li>The Supplier shall have no claim against the Purchaser in respect of delay due to the above constraints.</li> <li>As business requirements might change in future, items that are not listed on the price list might be procured via this contract. The Supplier will use the same pricing strategy for unlisted items as was used for listed items.</li> </ul>	
2. The requirements for transport are	Supplier is responsible for transporting the goods to the delivery place.	
3. The delivery place is	Kriel Power Station	
4. Actions of the Parties during supply	Action	Party which does it
_	Action  Giving notice of Delivery	Party which does it Supplier
_		-
_	Giving notice of Delivery  Checking packing and marking before	Supplier
_	Giving notice of Delivery  Checking packing and marking before dispatch	Supplier Supplier
_	Giving notice of Delivery  Checking packing and marking before dispatch  Contracting for transport	Supplier Supplier Supplier
_	Giving notice of Delivery  Checking packing and marking before dispatch  Contracting for transport  Pay costs of transport	Supplier Supplier Supplier Supplier
_	Giving notice of Delivery  Checking packing and marking before dispatch  Contracting for transport  Pay costs of transport  Arrange access to delivery place	Supplier Supplier Supplier Supplier Purchaser
_	Giving notice of Delivery  Checking packing and marking before dispatch  Contracting for transport  Pay costs of transport  Arrange access to delivery place  Loading the goods	Supplier Supplier Supplier Supplier Purchaser Supplier
supply	Giving notice of Delivery  Checking packing and marking before dispatch  Contracting for transport  Pay costs of transport  Arrange access to delivery place  Loading the goods  Unloading the goods	Supplier Supplier Supplier Supplier Purchaser Supplier
supply	Giving notice of Delivery  Checking packing and marking before dispatch  Contracting for transport  Pay costs of transport  Arrange access to delivery place  Loading the goods  Unloading the goods  Undertake export requirements	Supplier Supplier Supplier Supplier Purchaser Supplier
For international procurement  5. Information to be provided by the	Giving notice of Delivery  Checking packing and marking before dispatch  Contracting for transport  Pay costs of transport  Arrange access to delivery place  Loading the goods  Unloading the goods  Undertake export requirements  Undertake import requirements	Supplier Supplier Supplier Supplier Purchaser Supplier

	Delivery Note
	Material Test certificates, QCPs and Datapacks
For international procurement	Licences, authorisations and other formalities associated with export of the <i>goods</i>
	Air Waybill or Bill of Lading with associated landing, delivery and forwarding order
	The Bill of Entry endorsed by the importation authority
	Customs work sheets, showing tax, duties and surcharges which the law of the country into which the <i>goods</i> are being imported requires the importer to pay
	Invoice from the importation clearing agent showing airline fees, landing charges, wharfage and dock dues as applicable
	Specify other import documents required by authorised officials.

All other information  $\underline{\mathsf{NOT}}$  pertinent to the above is given in the balance of the Goods Information

## C1.2 Contract Data

## Part two - Data provided by the Supplier

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

### Notes to a tendering supplier:

- 1. Please read both the NEC3 Supply Contract (SC3)<sup>4</sup> and the relevant parts of its Guidance Notes (SC3-GN)<sup>5</sup> in order to understand the implications of this Data which the tenderer is required to complete.
- 2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data
- 3. Where a form field like this [ ] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

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

Clause	Statement	D	ata	
10.1	The Supplier is (Name):			
	Address			
	Tel No.			
	Fax No.			
11.2(8)	The Goods Information for the <i>Supplier's</i> design is in:			
11.2(11)	The tendered total of the Prices is	R	, (in words)	
11.2(12)	The price schedule is in:			
11.2(14)	The following matters will be included in the Risk Register			
25.2	The restrictions to access for the <i>Supply Manager</i> and Others to work being done for this contract are			
30.1	The delivery date of the goods and services is:	g	oods and services	delivery date
		1	Supply And Delivery of ESP Mechanical Spares as and when required	As per accepted programme per order
31.1	The programme identified in the Contract Data is contained in:			

<sup>&</sup>lt;sup>4</sup> Either April 2013 or December 2009 Edition as stated by *Purchaser* in Contract Data part 1.

PART C1: AGREEMENTS & CONTRACT DATA

<sup>&</sup>lt;sup>5</sup> Available from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902, or www.ecs.co.za

ESKOM HOLDINGS SOC LTD

KRIEL REFURBISHMENT PROJECT
SUPPLY AND DELIVERY OF UNIT 5 ELECTROSTATIC PRECIPITATOR (ESP) MECHANICAL SPARES ON AN "AS AND WHEN REQUIRED BASIS" AT KRIEL POWER STATION FOR A PERIOD OF 4 MONTHS

63.2 The percentage for overheads and profit added to the Defined Cost is

%

PART C1: AGREEMENTS & CONTRACT DATA

## **PART 2: PRICING DATA**

## **NEC3 Supply Contract**

Document reference	Title	No of pages
C2.	Pricing assumptions	2
C2.	The price schedule	7

## C2.1 Pricing assumptions

## 1. How goods and services are priced and assessed for payment

Clause 11 in NEC3 Supply Contract, (SC3) core clauses states:

## Identified and defined terms

- 11 11.2
- (11) The Prices are the amounts stated in the price column of the Price Schedule. Where a quantity is stated for an item in the Price Schedule, the Price is calculated by multiplying the quantity by the rate.
- (12) The Price Schedule is the *price schedule* unless later changed in accordance with this contract.

## Assessing the amount due

50.2 The amount due is

- the Price for each lump sum item in the Price Schedule which the Supplier has completed,
- where a quantity is stated for an item in the Price Schedule, an amount calculated by multiplying the quantity which the Supplier has completed by the rate,
- plus other amounts to be paid to the Supplier,
- less amounts to be paid by or retained from the Supplier.

Any tax which the law requires the *Purchaser* to pay to the *Supplier* is included in the amount due.

This confirms that the Supply Contract is a priced contract where the Prices are derived from a list of items of *goods* and *services* which can be priced as lump sums or as expected quantities of *goods* and *services* multiplied by a rate, or a mix of both.

### 2. Function of the Price Schedule

Clause 53.1 states: "Information in the Price Schedule is not Goods Information". This confirms that instructions to do work or how it is to be done are not included in the Price Schedule but in the Goods Information. This is further confirmed by Clause 20.1 which states, "The Supplier Provides the Goods and Services in accordance with the Goods Information". Hence the Supplier does **not** Provide the Goods and Services in accordance with the Price Schedule. The Price Schedule is only a pricing document.

## 3. Preparing the *price schedule*

Items in the *price schedule* may have been inserted by the *Purchaser* and the tendering supplier should insert any additional items which he considers necessary. Whichever party provides the items in the *price schedule* the total of the Prices is assumed to be fully inclusive of everything necessary to Provide the Goods and Services as described at the time of entering into this contract.

It will be assumed that the tendering supplier has

- Read Pages 8, 11, 12 and Appendix 5 of the SC3 Guidance Notes before preparing the *price* schedule:
- Included in his Prices and rates for correction of Defects (core clause 43.1) as there is no compensation event for this unless the Defect is due to a *Supplier's* risk;
- Spread the cost of doing work he chooses not to list as separate items in the *price schedule* across other Prices and rates in order to fulfil the obligation to Provide the Goods and Services for

the tendered total of the Prices;

- Understood that there is no adjustment to lump sum prices in the *price schedule* if the amount, or quantity, of work within that lump sum item later turns out to be different to that which the *Supplier* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event per clause 60.1;
- Understood that the *Supplier* does not have to allow in his Prices and rates for matters that may arise as a result of a compensation event.

## 3.1. Format of the price schedule

Entries in the first four columns in the *price schedule* in section C2.2 are made either by the *Purchaser* or the tendering supplier.

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

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

If the *Supplier* is to be paid an amount for an item proportional to the length of time for which the *goods* and *services* are provided, a unit of time is stated in the Unit column and the length of time (as a quantity of the stated units of time) is stated in the Quantity column.

# C2.2 the price schedule

Item No.	Material Description	Activity	Currency	Unit	Qty	Rate	Total Price
1	ANGLE STRCTRL:50 MM;6 MM;LG 6 M;MS;4.47	Manufacture & Supply	ZAR	KG	800.00		
2	SPROCKET:32;OD 200 MM;40 MM;20 MM;170 MM	Manufacture & Supply	ZAR	EA	33.00		
3	CHANNEL STRCTRL:WD 38 MM;LG 6 M;HT 76 MM	Manufacture & Supply	ZAR	KG	335.00		
4	CHAIN PWR TXMSN:LG 5 M;3/4 IN;STL	Manufacture & Supply	ZAR	M	12.00		
5	ROLLER BRG:OD 60 MM;LG 230 MM;EN9;ID 20	Manufacture & Supply	ZAR	EA	96.00		
6	PAD BRG	Manufacture & Supply	ZAR	EA	60.00		
7	WASHER FLAT:M12;ID 12.7 MM;18 MM;THK 2	Manufacture & Supply	ZAR	EA	1 000.00		
8	BOLT ASSY:GP;M8;LG 25 MM;HEX;4.6;MS;25;1	Manufacture & Supply	ZAR	KG	250.00		
9	PAD BRG:WD 50 X LG 100 X THK 20 MM;STL	Manufacture & Supply	ZAR	EA	160.00		
10	ANGLE STRCTRL:50 MM;5 MM;LG 6 M;CS;3.77	Manufacture & Supply	ZAR	KG	189.00		
11	INSUL:TORQUE;DIA 70 X LG 380 MM;660 V	Manufacture & Supply	ZAR	EA	24.00		
12	BOLT ASSY:GP;M12;LG 100 MM;HEX;4.6;MS;35	Manufacture & Supply	ZAR	KG	300.00		
13	CLLR:ID 61 X OD 85 X THK 20 MM;ST52	Manufacture & Supply	ZAR	EA	64.00		
14	BAR RD: 60MM;LG 6 M;STL BS 970;EN3A;22	Manufacture & Supply	ZAR	KG	48.00		
15	BOLT ASSY:M24;LG 125 MM;HEX;HTS;3 MM;1	Manufacture & Supply	ZAR	KG	400.00		
16	BOLT ASSY:M16;LG 80 MM;HEX;HTS;2 MM;1	Manufacture & Supply	ZAR	KG	400.00		
17	DOOR HTCH:PRECIP INSPECTION; PRECIPS	Manufacture & Supply	ZAR	EA	20.00		
18	BAR RD:20 MM;LG 6 M;MS BS 4360;EN43A	Manufacture & Supply	ZAR	KG	150.00		
19	WASHER:ELECTROSTATIC PRECIPITATOR; THK 5	Manufacture & Supply	ZAR	EA	128.00		
20	PIPE MTLC:88.9 MM;STL GR B ASTM A106;40	Manufacture & Supply	ZAR	М	100.00		
21	BOLT ASSY:GP;M16;LG 75 MM;HEX;4.6;MS;38	Manufacture & Supply	ZAR	KG	400.00		
22	BRG BAL:CONRAD;OPEN;ID 40 MM;OD 90 MM	Manufacture & Supply	ZAR	EA	64.00		
23	COUPLING SHFT FLEX:DRIVE UNIT;160 MM;560	Manufacture & Supply	ZAR	EA	16.00		

KRIEL REFURBISHMENT PROJECT

24	SCREEN:PRECIPITATOR INLET;35 MM;MS	Manufacture & Supply	ZAR	EA	20.00
25	BOLT ASSY:GP;M16;LG 65 MM;HEX;4.6; MS;40	Manufacture & Supply	ZAR	KG	200.00
26	PAD BRG:WD 60 X LG 80 X THK 32MM; MS	Manufacture & Supply	ZAR	EA	192.00
27	BOLT ASSY:GP;M24;LG 125 MM;HEX; 4.6;MS;60	Manufacture & Supply	ZAR	KG	300.00
28	BOLT ASSY:GP;M12;LG 75 MM;HEX; 4.6;MS;35	Manufacture & Supply	ZAR	KG	210.00
29	HAMMER:PRECIPITATOR;5.8 KG;MS;STL	Manufacture & Supply	ZAR	EA	736.00
30	BAR FLAT:WD 50 MM;LG 6 M;THK 20MM; 43A	Manufacture & Supply	ZAR	KG	300.00
31	BAR FLAT:WD 100 MM;LG 6 M;THK 12 MM; 9.42	Manufacture & Supply	ZAR	KG	300.00
32	SPROCKET:32;OD 200 MM;60 MM;20 MM; 170 MM	Manufacture & Supply	ZAR	EA	16.00
33	REDUCER PIPE:CONCENTRIC;25 X 15 MM; FNPT	Manufacture & Supply	ZAR	EA	64.00
34	BRG RLR:SELF ALIGNING;ID 65 MM;OD 120 MM	Manufacture & Supply	ZAR	EA	32.00
35	ANVIL:DISCHARGE ELECTRODE; 28-45-54005	Manufacture & Supply	ZAR	EA	752.00
36	SLEEVE ADPTR:BEARING;60 MM;LG 50 MM; STL	Manufacture & Supply	ZAR	EA	16.00
37	ANGLE STRCTRL:76 X 50 MM;6 MM;LG 6M; MS	Manufacture & Supply	ZAR	KG	300.00
38	SHEET MTL:WD 1.225 M;LG 2.45 M;THK 3 MM	Manufacture & Supply	ZAR	KG	800.00
39	WASHER LK:ID 8.6 MM;OD 12.8MM; THK 2 MM	Manufacture & Supply	ZAR	EA	1 000.00
40	HOOD:WD 280 X LG 265 X THK 4 MM;PTFE	Manufacture & Supply	ZAR	EA	64.00
41	CHAIN:WELD;ID 5.5 X OD 22.4MM; STL;LG 30	Manufacture & Supply	ZAR	M	60.00
42	PLATE MTL:WD 1.2 M X LG 2.5 M X THK 6 MM	Manufacture & Supply	ZAR	KG	6 000.00
43	SHEET GSKT:THK 3 MM;LG 2 M;WD 1.5 M	Manufacture & Supply	ZAR	EA	2.00
44	GEARBOX:MOTOR;3800:1;0.36 RPM; 0.37-51 KW	Manufacture & Supply	ZAR	EA	16.00
45	UNION PIPE:25 MM;FPT;STL GALV;SABS 763	Manufacture & Supply	ZAR	EA	180.00
46	BUSH:CONICAL RAPPER BAR;ID 17 MM; OD 80	Manufacture & Supply	ZAR	EA	7 520.00
47	WASHER FLAT:M12;ID 13.5 MM;24 MM; THK 2.5	Manufacture & Supply	ZAR	KG	300.00
48	FILTER ELMNT:OIL;ID 57 X OD 130 X LG 197	Manufacture & Supply	ZAR	EA	60.00

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49	COUPLING SHFT:UNIVERSAL;60 MM;OD 92 MM	Manufacture & Supply	ZAR	EA	32.00
50	LINK CHN TXMSN:CONNECTING;STL;20 MM	Manufacture & Supply	ZAR	EA	32.00
51	TEE PIPE:25 MM;FBSP;STL GALV	Manufacture & Supply	ZAR	EA	25.00
52	PIPE MTLC:80 MM;CS ASTM A106;LG 6 M;5.49	Manufacture & Supply	ZAR	М	100.00
53	COUPLING: NEUPEX A;160MM;CAST IRON;108	Manufacture & Supply	ZAR	EA	16.00
54	SEAL OIL:ID 40 MM;OD 52 MM;WD 7 MM;YES	Manufacture & Supply	ZAR	EA	30.00
55	BRG BAL:CONRAD;DOUBLE SEAL;ID 40 MM	Manufacture & Supply	ZAR	EA	48.00
56	BRG BAL:CONRAD;SHIELD;ID 60 MM;OD 130 MM	Manufacture & Supply	ZAR	EA	32.00
57	SHEET GSKT:THK 2 MM;LG 2 M;WD 1.5 M	Manufacture & Supply	ZAR	EA	2.00
58	BAR RD:12MM;LG 6 M;MS BS 4360;EN43A	Manufacture & Supply	ZAR	KG	3.00
59	SCREEN:PRECIPITATOR INLET;50 MM;MS	Manufacture & Supply	ZAR	EA	80.00
60	FRAME:RIGID;LG5100 X HT11707;MILD STEEL	Manufacture & Supply	ZAR	EA	188.00
61	PLATE:CORRUGATED SHEET; CARBON STEEL. PLATE: TYPE: CORRUGATED SHEET; DIMENSIONS: LG482 X HT13000 XTHK1.6 MM; MATERIAL: CARBON STEEL; DRAWING NO: 0.45/57218; MATERIAL CERTIFICATE 3.1	Manufacture & Supply	ZAR	EA	950.00
62	HOUSING BRG UNIT:PILLOW;ID 67 MM;CI	Manufacture & Supply	ZAR	EA	16.00
63	PIPE MTLC:NB 100 MM;B ASTM A106;LG 6 M	Manufacture & Supply	ZAR	EA	15.00
64	BAR RD:60 MM;LG 6 M;MS BRIGHT; MACHINED	Manufacture & Supply	ZAR	KG	28.00
65	HAMMER:COLLECTOR;4 LB;STL;STL	Manufacture & Supply	ZAR	EA	752.00
66	SUPPORT:INSULATOR;DIA 188 X LG 485 MM	Manufacture & Supply	ZAR	EA	64.00
67	REDUCER PIPE:CONCENTRIC BELL;100 X 80 MM	Manufacture & Supply	ZAR	EA	32.00
68	NIPPLE PIPE:BARREL;ID 80 MM;LG 102 MM	Manufacture & Supply	ZAR	EA	100.00
69	BOLT MACH:M10;LG 12 MM;HEX;SS GR 316	Manufacture & Supply	ZAR	KG	100.00
70	BOLT ASSY:GP;M30X125MM;HEX; 8.8;MS	Manufacture & Supply	ZAR	KG	250.00
71	BAR RD:16 MM;LG 6 M;MS BS 4360; EN43A	Manufacture & Supply	ZAR	KG	32.00
72	BOLT ASSY:GP;M20X130MM;HEX; 8.8;MS	Manufacture & Supply	ZAR	KG	250.00
73	SPROCKET:19;OD 122 MM;40 MM;20 MM;STL	Manufacture & Supply	ZAR	EA	24.00
74	BOLT ASSY:GP;M16X100MM;HEX;8.8; MS CARRIER BEAM BOLTS	Manufacture & Supply	ZAR	KG	650.00
75	BOLT ASSY:GP;M12X120MM;HEX; 8.8;MS	Manufacture & Supply	ZAR	KG	200.00

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76	BOLT ASSY:GP;M24X100MM;HEX;8.8; MS	Manufacture & Supply	ZAR	KG	200.00	
77	BOLT ASSY:GP;M12X40MM;HEX;8.8; MS	Manufacture & Supply	ZAR	KG	200.00	
78	ANGLE STRCTRL:100 MM;10 MM;LG 6M; CS;15	Manufacture & Supply	ZAR	KG	450.00	
79	BOLT ASSY:GP;M12X180MM;HEX; 8.8;MS	Manufacture & Supply	ZAR	KG	250.00	
80	BOLT ASSY:GP;M12X50MM;HEX;8.8; MS	Manufacture & Supply	ZAR	KG	250.00	
81	BOLT ASSY:GP;M12X75MM;HEX;8.8; MS	Manufacture & Supply	ZAR	KG	200.00	
82	BOLT U:60 MM;M10;110 MM;45 MM;1.5 MM; GMS	Manufacture & Supply	ZAR	EA	752.00	
83	GEARBOX:RAPPER;0.18 KW; R73R40DT63N4	Manufacture & Supply	ZAR	EA	16.00	
84	BOLT ASSY:GP;M16;LG 100 MM;HEX; 4.6;MS;40	Manufacture & Supply	ZAR	KG	400.00	
85	CE RAPPER BAR ANVIL HEAD	Manufacture & Supply	ZAR	NO	188.00	
86	BOLT ASSY:GP;M16;LG 50 MM;HEX;4.6; MS;50	Manufacture & Supply	ZAR	KG	6 560.00	
87	CE RAPPER BAR UNIT	Manufacture & Supply	ZAR	NO	188.00	
88	PLATE MTL:MS;235.5 KG;HOT ROLLED; EN43A	Manufacture & Supply	ZAR	KG	471.00	
89	BOLT ASSY:M16;LG 180 MM;HEX;MS; 2 MM;1	Manufacture & Supply	ZAR	KG	300.00	
90	CE PLATE STABILIZER	Manufacture & Supply	ZAR	NO	188.00	
91	BOLT U:40 MM;M10;80 MM;30 MM;1.5 MM; GMS	Manufacture & Supply	ZAR	KG	736.00	
92	BAR SQ:WD 12 MM;LG 6 M;MS;HOT ROLLED	Manufacture & Supply	ZAR	KG	4.00	
93	ANGLE STRCTRL:80 MM;6 MM;LG 6 M;MS;7.34	Manufacture & Supply	ZAR	KG	20.00	
94	SCREW CAP:1/4 IN;LG 1 IN;20BSW;HEX; MS	Manufacture & Supply	ZAR	EA	208.00	
95	CE PLATE STABILIZER BRACKET LUG	Manufacture & Supply	ZAR	NO	376.00	
96	BAR FLAT:WD 100 MM;LG 6 M;THK 6 MM; EN43A	Manufacture & Supply	ZAR	KG	470.00	
97	BOLT ASSY:GP;M20X130MM;HEX; 8.8;MS	Manufacture & Supply	ZAR	KG	250.00	
98	CE CARRIER BEAMS(1ST FIELD ONLY)	Manufacture & Supply	ZAR	NO	188.00	
99	BOLT ASSY:GP;M12;LG 65 MM;HEX; 4.6;MS;33	Manufacture & Supply	ZAR	KG	250.00	
100	PLATE MTL:WD 1.2 M X LG 2.5 M X THK 8 MM	Manufacture & Supply	ZAR	KG	40.00	
101	BOLT ASSY:GP;M30X125MM;HEX; 8.8;MS	Manufacture & Supply	ZAR	KG	250.00	
102	BOLT ASSY:M12;LG 45 MM;HEX; MS; 1.75 MM;1	Manufacture & Supply	ZAR	KG	600.00	
103	BOLT ASSY:GP;M12X40MM;HEX;8.8;MS	Manufacture & Supply	ZAR	KG	200.00	
104	M16 SQAURE WASHERS	Manufacture & Supply	ZAR	EA	1	

					000.00	
105	BOLT ASSY:GP;M12X50MM;HEX;8.8;MS	Manufacture & Supply	ZAR	KG	200.00	
106	SEAL OIL:PILLOW BLOCK;RUBBER	Manufacture & Supply	ZAR	EA	16.00	
107	BOLT ASSY:GP;M16X100MM;HEX;8.8; MS CARRIER BEAM BOLTS	Manufacture & Supply	ZAR	KG	650.00	
108	DE BEARING CARTRIDGE UNIT	Manufacture & Supply	ZAR	NO	16.00	
109	BOLT ASSY:GP;M12X120MM;HEX; 8.8;MS	Manufacture & Supply	ZAR	KG	200.00	
110	BOLT ASSY:GP;M24X100MM;HEX; 8.8;MS	Manufacture & Supply	ZAR	KG	200.00	
111	BOLT ASSY:GP;M12X75MM;HEX;8.8;MS	Manufacture & Supply	ZAR	KG	200.00	
112	DE SPLIT BUSHING	Manufacture & Supply	ZAR	EA	64.00	
113	NOZZLES - QUARTER INCH	Manufacture & Supply	ZAR	EA	128.00	
114	PACKING BULK:LG 30 M;BRAIDED ROPE	Manufacture & Supply	ZAR	KG	20.00	
115	PACKING BULK:WD 12.7 MM;THK 12.7 MM; 250	Manufacture & Supply	ZAR	KG	50.00	
116	PACKING 6.3MM	Manufacture & Supply	ZAR	KG	10.00	
118	PAPER GASKET 3MM	Manufacture & Supply	ZAR	KG	10.00	
117	PACKING BULK:WD 8 MM;THK 8 MM; LG 8 M;SQ	Manufacture & Supply	ZAR	KG	10.00	
118	BOLT ASSY:GP;M12X180MM;HEX;8.8; MS	Manufacture & Supply	ZAR	KG	200.00	
119	BRG ASSY:INSULATED	Manufacture & Supply	ZAR	EA	16.00	
120	M16 KNOD LOCK	Manufacture & Supply	ZAR	EA	152.00	
121	DELIVERY, TRANSPORTATION AND OFFLOADING	Delivery, Transportation and Offloading	ZAR	Sum	1.00	
122	FACTORY ACCEPTANCE TESTING (FAT)	Engineering	ZAR	Sum	1.00	
123	DATABOOKS	Documentation	ZAR	Sum	1.00	
124	SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY (SHEQ) RELATED COSTS, PLANNING/MEDICAL TESTS/INDUCTION ETC.	Financial	ZAR	Sum	1.00	
Total o	Total of the Prices			R		

## **Rates Only:**

Unit 5 ESP Material Supply at Kriel Power Station (Rates Only)					
Item	Material Description	Unit of Measure	Rate (ZAR)		
No.					
1	BOLT ASSY:GP;M10;LG 50 MM;HEX;4.6;MS;30	KG			

#### **ENQUIRY NUMBER. MPKRI11062PS**

2	CHANNEL STRCTRL:WD 38 MM;LG 6 M;HT 76 MM	KG	
3	SHEET GSKT:THK 3 MM;LG 1 M;WD 1 M;GR53	EA	
4	TUBE MTLC:33.4 MM;LG 6 M;SS GR 316	M	
5	BOLT ASSY:GP;M12;LG 30 MM;HEX;4.6;MS;30	KG	
6	GASKET PC:ID 585 X OD 625 MM;THK 5 MM	EA	
7	BOLT ASSY:GP;M16;LG 40 MM;HEX;4.6;MS;25	KG	
8	GASKET PC:ID 330 X OD 370 MM;THK 5 MM	EA	
9	BAR RD:10 MM;LG 6 M;MS BS 4360;EN43A	KG	
10	BOLT MACH:M10;LG 20 MM;HEX;SS GR 316	EA	
11	BOLT ASSY:M16;LG 140 MM;HEX;MS;2 MM;1	KG	
12	BOLT ASSY:GP;M16;LG 40 MM;HEX;4.6;MS;25	KG	
13	BOLT ASSY:GP;M12;LG 40 MM;HEX;4.6;MS;30	KG	
14	SEAL RNG:ID 30 MM;OD 94 MM;THK 10 MM	EA	
15	BAR RD:25 MM;LG 6 M;MS BS 4360;EN43A	KG	
16	OIL INDSTRL:DRUM 210 L;GEAR;GENGEAR 220	L	
17	OIL INDSTRL:DRUM 210 L;232 DEG C;GEAR	L	
18	MESH:WD 1.22 M X LG 2.5 M X THK 4.5 MM	EA	
19	BAR FLAT:WD 50 MM;LG 6 M;THK 6 MM;EN43A	KG	
20	BAR FLAT:WD 40 MM;LG 6 M;THK 6 MM;43A	KG	
21	PLATE MTL:MS;282.6 KG;HOT ROLLED;EN43A	KG	
22	CLEANER:GP;LIQD;PLASTIC 25 L	L	
23	BOLT ASSY:M16;LG 110 MM;HEX;HTS;2 MM;1	EA	
24	ANGLE STRCTRL:40 MM;6 MM;LG 6 M;MS;3.52	KG	
25	SHEET MTL:WD 1.2 M;LG 2.5 M;THK 2 MM	KG	
26	BOLT ASSY:GP;M16;LG 30 MM;HEX;4.6;MS;27	KG	
27	CHANNEL STRCTRL:WD 76 MM;LG 6 M;HT 152	KG	
28	BAR RD:30 MM;MS BS 4360-1986;HOT ROLLED	KG	
29	SEAL OIL:ID 45 MM;OD 62 MM;WD 10 MM;YES	EA	
30	SEAL:VL955864001;AUTO BLAST VALVE VS1	EA	
31	ANGLE STRCTRL:50 MM;8 MM;LG 6 M;MS;5.82	KG	
32	BRG BAL:DEEP GROOVE;OPEN;ID 55 MM;OD 120	EA	
33	BRG BAL:ANGULAR CONTACT;DOUBLE SEAL	EA	
34	PACKING BULK:LG 30 M;NON ASB GLASS BASED	KG	
35	SOLVENT:ELEC CLNR;25 L	L	
36	PAINT OIL: ZN CHROMAT	L	
37	SHEET MTL:WD 1.2 M;LG 2.4 M;THK 1.6 MM	KG	

#### **ENQUIRY NUMBER. MPKRI11062PS**

38	PIPE MTLC:NB 100 MM;B ASTM A106;LG 6 M;2	EA	
39	TAPE ADHSV:MASKING;WD 48 MM X LG 50 M	EA	
40	PACKING 6.3MM	EA	
41	PAPER GASKET 3MM	EA	
42	PACKING BULK:WD 8 MM;THK 8 MM;LG 8 M;SQ	EA	
43	DE CARRIER BEAMS	EA	
44	CE PLATE TOP BUSHING	EA	
45	CLEANER:LIQD;25 L	L	
46	TAPE THRD:SEALING;WD 10 MM;PTFE;WHITE	EA	
47	BRUSH PAINT:SETTER;WD 25 MM;FLAT;PLASTIC	EA	
48	THINNER PAINT:LACQUER;CAN 5 L	L	
49	PAIINT OIL: ZN CHROMAT	L	
50	CLEANER:DEGREASER;LIQD;DRUM 20 KG	EA	
51	PENETRANT:FLUID;CAN 350 ML	EA	
52	CLOTH:CLEANING;COTTON	KG	
53	COMPOUND SEALG:GASKET;RED;RUBBER SI	EA	
54	ROPE:COTTON FIBER BRAIDED;125 STRAND	KG	
55	PACKING BULK:LG 30 M;BRAIDED ROPE	KG	
56	PACKING BULK:WD 12.7 MM;THK 12.7 MM;250	KG	
57	ABSORBENT:ORGANIC;FIBER LOOSE;10 KG;BAG	EA	
58	PAINT OIL:LACQUER;RED SIGNAL;GLOSS;QUICK	L	
59	PAINT OIL:LACQUER;BLUE AZURE;GLOSS;QUICK	L	
60	PAINT OIL:LACQUER;WHITE APPLIANCE;GLOSS	L	
61	BRUSH PAINT:SETTER;WD 75 MM;FLAT;PLASTIC	EA	
62	BRUSH PAINT:SETTER;WD 50 MM;FLAT;PLASTIC	EA	
63	INHIBITOR:CORROSION PROTECTION	EA	
64	PAINT OIL:LACQUER;ORANGE GUNSTON;GLOSS	L	
65	TAPE ADHSV:MASKING;WD 48 MM X LG 50 M	EA	

## **PART 3: SCOPE OF WORK**

Document reference	Title	No of pages
	This cover page	1
C3.1	Purchaser's Goods Information	23
C3.2	Supplier's Goods Information	1
	Total number of pages	25

PART 3: SCOPE OF WORK

C3 SC3 /A COVER

## **C3.1: PURCHASER'S GOODS INFORMATION**

## **Contents**

Pa	art 3: S	Scope of Work	1
C:	3.1: <i>P</i> ເ	urchaser's Goods Information	2
1	Ove	erview and purpose of the goods and services	3
2	Spe	cification and description of the goods	3
	2.1	Purchaser's design	
	2.2	Procedure for submission and acceptance of Supplier's design	. 15
	2.3	Other requirements of the Supplier's design	
	2.4	Use of Supplier's design	
	2.5	Manufacture & fabrication	. 17
	2.6	Factory acceptance testing (FAT)	. 17
	2.7	Other tests and inspections and commissioning in place of use	
	2.8	Operating manuals and maintenance schedules	
3.	Sup	ply Requirements	. 17
4.	Spe	cification of the services to be provided	. 17
5.	Con	straints on how the Supplier Provides the Goods	. 18
	5.3	Programming constraints	. 18
	5.4	Work to be done by the Delivery Date	. 18
	5.5	Marking the goods	
	5.6	Constraints at the delivery place and place of use	. 18
	5.7	Cooperating with Others	
	5.8	Services & other things to be provided by the Purchaser or Supplier Error! Bookmark not defin	ıed.
	5.9	Management meetings	
	5.10	Documentation control	. 19
	5.11	Health and safety risk management	. 19
	5.12	Quality	. 22
	5.13	Invoicing and payment	. 23
	5.14	Insurance provided by the <i>Purchaser</i>	
	5.15	Contract change management	. 23
	5.16	Provision of bonds and guarantees	. 23
	5.17	Records of Defined Cost, payments & assessments of compensation events to be kept by the	
	Suppli		
		curement	. 24
	6.3	Subcontracting	
	6.3.		
	6.3.	2 Limitations on subcontracting	. 24
	6.3.		
	6.3.	· · · · · · · · · · · · · · · · · · ·	
	6.3.		
7.	List	of drawings	
	7.3	Drawings issued by the <i>Purchaser</i>	
C:	3.2	Supplier's Goods Information	1

#### Overview and purpose of the goods and services 1

Electrostatic precipitator (ESP) is the latest dust emission abatement technology use to remove dust particles out of flue gases before going through smokestack chimney to meet AEL limits requirements of 100 mg/Nm<sup>3</sup>. For this to happen effectively, maintenance work must be done at both all moving and damaged non-rotatable components found inside and outside ESP casing. The purpose of this contract is to make provision for the supply of unit 5 ESP Materials.

#### 2 Specification and description of the goods

The Supplier is responsible for the supply and delivery of the following materials.

Item No	Unit of Measure	Short Description	Long Description	Quantity Required
1	KG	BOLT ASSY:GP;M16; LG 50 MM;HEX;4.6;MS;50	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE; NOMINAL DIAMETER: M16; LENGTH: 50 MM; HEAD: HEX; GRADE: 4.6; MATERIAL: MS; THREAD LENGTH: 50 MM; THREAD: 2 MM; NUT QUANTITY: 1; NUT MATERIAL: MS; NUT GRADE: 4.6; BOLT PROTECTIVE COATING: BLACK; COARSE THREAD FREE FIT, ISOMETRIC; SPECIFICATION: SABS135	6560
2	KG	ANGLE STRCTRL:50 MM;6 MM;LG 6 M;MS;4.47	ANGLE, STRUCTURAL: LEG LENGTH: 50 MM; MATERIAL THICKNESS: 6 MM; LENGTH: 6 M; MATERIAL: MS; PROCESS: HOT ROLLED; WEIGHT: 4.47 KG/M; SPECIFICATION: SABS 1431; GRADE: 300WA EN43A; 26.82 KG/LENGTH	800
3	EA	SPROCKET:32;OD 200 MM;40 MM;20 MM;170 MM	SPROCKET: TEETH: 32; OUTSIDE DIAMETER: 200 MM; BORE: 40 MM; PITCH: 20 MM; ROOT DIAMETER: 170 MM; MATERIAL: STL; SUPPL P/N: 583-6-0-06 3/4"; FOR THE NEW PRECIPITORS DRIVES, FOR UNIT 1, 2, 3 AND 6 OF THE DRIVE SHAFT	33
4	KG	CHANNEL STRCTRL:WD 38 MM;LG 6 M;HT 76 MM	CHANNEL, STRUCTURAL: WIDTH: 38 MM; LENGTH: 6 M; HEIGHT: 76 MM; MATERIAL: MS; PROCESS: HOT ROLLED; GRADE: EN43A; WEIGHT: 6.7 KG/M; SPECIFICATION: SABS 1431- 300WA	335
5	М	CHAIN PWR TXMSN: LG 5 M;3/4 IN; STL	CHAIN, POWER TRANSMISSION: LENGTH: 5 M; PITCH: 3/4 IN; MATERIAL: STL; SUPPL P/N: 12B-1; REFERENCE NO: 1642/1; TYPE: TRAVERSE DRIVE; FOR LONG STROKE SOOTBLOWERS	12
6	EA	PIPE MTLC: NB 100 MM; B ASTM A106; LG 6 M	PIPE, METALLIC: NOMINAL PIPE SIZE DESIGNATION: NB 100 MM; MATERIAL: B ASTM A106; LENGTH: 6 M; WALL THICKNESS: 6.02 MM; CONSTRUCTION: SEAMLESS; MAXIMUM OPERATING PRESSURE: 2 MPA G; SCHEDULE: 40; MAXIMUM OPERATING TEMP: 150 DEG C; GRADE: B; PIPE TO BE SUPPLIED WITH 3.1 CEDRTIFICATION AS EN 10204	15
7	EA	ROLLER BRG: OD 60 MM; LG 230 MM; EN9; ID 20	ROLLER, BEARING: OUTSIDE DIAME+E14:E149TER: 60 MM; LENGTH: 230 MM; MATERIAL: EN9; ALIGNMENT TYPE: AXIAL/LINEAR; INSIDE DIAMETER: 20 MM; TYPE: CE RAPPER SHAFT PEDESTAL; DRAWING NO:	96

KRIEL REFURBISHMENT PROJECT SUPPLY AND DELIVERY OF UNIT 5 ELECTROSTATIC PRECIPITATOR (ESP) MECHANICAL SPARES ON AN "AS AND WHEN

REQUIRED BASIS" AT KRIE	L POWER STATION FOR A PERIOD OF 4 MONTHS

			045.57218 REV 0; MANUFACTURE ACCORDING	
			TO ESKOM STANDARDS; MATERIAL CERTIFICATE REQUIRED FOR THE ROLLERS AND BUSHES; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	1000
8	EA	WASHER FLAT:M12;ID 12.7 MM;18 MM;THK 2	WASHER, FLAT: NOMINAL SIZE: M12; INE15:E77SIDE DIAMETER: 12.7 MM; OUTER SIZE: 18 MM; THICKNESS: 2 MM; MATERIAL: CU; PERIPHERAL SHAPE STYLE: RD; OD 24 MM	1000
9	EA	PAD BRG	PAD, BEARING: SUPPL P/N: KVB3/123/D; REFERENCE NO: KVB/123/D; SLIDING V; LOCATING; FOR BRANDT PRECIPITATORS V TYPE DISCHARGE BEARING; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	60
10	KG	BOLT ASSY:GP;M8;L G 25 MM;HEX;4.6;MS;25 ;1	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE; NOMINAL DIAMETER: M8; LENGTH: 25 MM; HEAD: HEX; GRADE: 4.6; MATERIAL: MS; THREAD LENGTH: 25 MM; THREAD: 1.25 MM; NUT QUANTITY: 1; NUT MATERIAL: MS; NUT GRADE: 4.6; BOLT PROTECTIVE COATING: BLACK; DIN555; SPECIFICATION: SABS 135	250
11	EA	PAD BRG:WD 50 X LG 100 X THK 20 MM;STL	PAD, BEARING: DIMENSIONS: WD 50 X LG 100 X THK 20 MM; MATERIAL: STL; SUPPL P/N: KVB-123-D; KVB2-123-D; SLIDING V; FOR BRANDT PRECIPITATORS V; TYPE DISCHARGE BEARING; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	160
12	KG	ANGLE STRCTRL:50 MM;5 MM;LG 6 M;CS;3.77	ANGLE, STRUCTURAL: LEG LENGTH: 50 MM; MATERIAL THICKNESS: 5 MM; LENGTH: 6 M; MATERIAL: CS; PROCESS: HOT ROLLED; WEIGHT: 3.77 KG/M; GRADE: EN43A	189
13	EA	INSUL:TORQUE;DI A 70 X LG 380 MM;660 V	INSULATOR: TYPE: TORQUE; DIMENSIONS: DIA 70 X LG 380 MM; MATERIAL: PORCELAIN; POTENTIAL: 660 V; WITHOUT UNIVERSALS, FOR PRECIPITATOR	24
14	KG	BOLT ASSY:GP;M12; LG 100 MM;HEX;4.6;MS;35	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE; NOMINAL DIAMETER: M12; LENGTH: 100 MM; HEAD: HEX; GRADE: 4.6; MATERIAL: MS; THREAD LENGTH: 35 MM; THREAD: 1.75 MM; NUT QUANTITY: 1; NUT MATERIAL: MS; NUT GRADE: 4.6; BOLT PROTECTIVE COATING: BLACK; SPECIFICATION: SABS 135	300
15	L	CLEANER:LIQD;25 L	CLEANER: FORM: LIQUID; CONTAINER: 25 L; SUPPL P/N: FO537A; A FULLY BIODEGRADABLE WATER BASE HEAVY DEGREASER; REQUIRE A MATERIAL SAFETY DATA SHEET WITH EACH DELIVERY, PLASTIC	200

KRIEL REFURBISHMENT PROJECT
SUPPLY AND DELIVERY OF UNIT 5 ELECTROSTATIC PRECIPITATOR (ESP) MECHANICAL SPARES ON AN "AS AND WHEN

SUPPLY AND DELIVERY OF UNIT	S ELECTROSTATIC PRECIPI	TATUR (ESP	) MECHANICAL SPAKES OF	A AIN AO AI
REQUIRED BASIS" AT KRIEL POW	ER STATION FOR A PERIOD	OF 4 MONT	HS	

16	EA	CLLR:ID 61 X OD 85 X THK 20 MM;ST52	COLLAR: DIMENSIONS: ID 61 X OD 85 X THK 20 MM; MATERIAL: ST52; TYPE: LOCATING; APPLICATIOIN: COLLECTING ELECTRODE SHAFT ALLIGNMENT INSIDE PRECIPS	64
17	KG	BAR RD: 60MM;LG 6 M;STL BS 970;EN3A;22	BAR, ROUND: NOMINAL DIAMETER: 60 MM; LENGTH: 6 M; MATERIAL: STL BS 970; PROCESS: COLD DRAWN; GRADE: EN3A; WEIGHT: 22 KG/M; SPECIFICATION: SAE/AISI 1018 GR 080A15/070M20; MATERIAL AND TECHNICAL CERTIFICATE TO BE PROVIDED ON EVERY DELIVERY	48
18	EA	BOLT ASSY:M24;LG 125 MM;HEX;HTS;3 MM;1	BAR, ROUND: NOMINAL DIAMETER: 60 MM; LENGTH: 6 M; MATERIAL: STL BS 970; PROCESS: COLD DRAWN; GRADE: EN3A; WEIGHT: 22 KG/M; SPECIFICATION: SAE/AISI 1018 GR 080A15/070M20; MATERIAL AND TECHNICAL CERTIFICATE TO BE PROVIDED ON EVERY DELIVERY	400
19	KG	BOLT ASSY:M16;LG 80 MM;HEX;HTS;2 MM;1	BOLT, ASSEMBLY: NOMINAL DIAMETER: M16; LENGTH: 80 MM; HEAD: HEX; MATERIAL: HTS; THREAD: 2 MM; NUT QUANTITY: 1; FOR PRECIPITATORS	400
20	KG	BAR RD:20 MM;LG 6 M;MS BS 4360;EN43A	BAR, ROUND: NOMINAL DIAMETER: 20 MM; LENGTH: 6 M; MATERIAL: MS BS 4360; PROCESS: HOT ROLLED; GRADE: EN43A; WEIGHT: 2.47 KG/M; (DSG-310-048; Q2:2:1:NEV)	150
21	EA	BOLT U:60 MM;M10;110 MM;45 MM;1.5 MM;GMS	BOLT, U: NOMINAL SIZE: 60 MM; DIAMETER: M10; INSIDE LENGTH: 110 MM; THREAD LENGTH: 45 MM; THREAD: 1.5 MM; MATERIAL: GMS; INSIDE WIDTH: 62 MM; WITH WASHER INSIDE LENGTH: 110MM; INSIDE WIDTH: 62MM; NOMINAL SIZE: 60MM	752
22	KG	PACKING BULK:WD 12.7 MM;THK 12.7 MM;250	PACKING, BULK: WIDTH: 12.7 MM; THICKNESS: 12.7 MM; MATERIAL: CARBON FIBER; APPLICATION: PUMP AND VALVE; MAX PRESSURE: 250 BAR; PH VALUE RANGE: 0-13; TYPE: GENERAL SERVICE; SHAPE: SQ; SUPPL P/N: 477-1; MUST BE ASBESTOS FREE; NOTE - ITEM MUST BE ORIGINAL PACKED	50
23	KG	BOLT ASSY:GP;M16; LG 100 MM;HEX;4.6;MS;40	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE; NOMINAL DIAMETER: M16; LENGTH: 100 MM; HEAD: HEX; GRADE: 4.6; MATERIAL: MS; THREAD LENGTH: 40 MM; THREAD: 2 MM; NUT QUANTITY: 1; NUT MATERIAL: MS; NUT GRADE: 4.6; BOLT PROTECTIVE COATING: BLACK; SPECIFICATION: SABS 135	400
24	EA	DOOR HTCH:PRECIP INSPECTION;PRE CIPS	DOOR, HATCH: TYPE: PRECIP INSPECTION; MATERIAL: AL GR LM4 ALLOY; DIMENSIONS: DIA 570 X THK 17 MM; APPLICATION: PRECIPS; DRAWING NO: 0.45/57035 REV 0; ITEM TO BE MANUFACTURED AS PER ESKOM REQUIREMENT STANDARD; HANDLES INCLUDED; MATERIAL CERTIFICATE REQUIRED WITH EACH ITEM ON DELIVERY; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	20

25	EA	WASHER:ELECTR OSTATIC PRECIPITATOR;T HK 5	WASHER: TYPE: ELECTROSTATIC PRECIPITATOR; THICKNESS: 5 MM; MATERIAL: TEFLON; SHIELD; 688X688X5MM SQUARE; TEMPERATURE RESISTANT TO 180 DEGREE CELSIUS; FOR PRECIPITATORS	128
26	KG	BOLT ASSY:GP;M16; LG 75 MM;HEX;4.6;MS;38	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE; NOMINAL DIAMETER: M16; LENGTH: 75 MM; HEAD: HEX; GRADE: 4.6; MATERIAL: MS; THREAD LENGTH: 38 MM; THREAD: 2 MM; NUT QUANTITY: 1; NUT MATERIAL: MS; NUT GRADE: 4.6; BOLT PROTECTIVE COATING: BLACK; SPECIFICATION: SABS 135	400
27	EA	BRG BAL:CONRAD; OPEN;ID 40 MM;OD 90 MM	BEARING, BALL: TYPE: CONRAD; STYLE: OPEN; INSIDE DIAMETER: 40 MM; OUTSIDE DIAMETER: 90 MM; WIDTH: 23 MM; ROW: SINGLE; SUPPL P/N: 6308; NOTE: ITEM MUST BE ORIGINAL PACKED; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	64
28	KG	ROPE: COTTON FIBER BRAIDED;125 STRAND	ROPE: MATERIAL: COTTON FIBER BRAIDED; DIMENSIONS: DIA 20 MM X LG 30 M; STRUCTURE: 125 STRAND; NON-ASBESTOS, SOFT WHITE	20
29	KG	BOLT ASSY:GP;M16; LG 65 MM;HEX;4.6;MS;40	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE; NOMINAL DIAMETER: M16; LENGTH: 65 MM; HEAD: HEX; GRADE: 4.6; MATERIAL: MS; THREAD LENGTH: 40 MM; THREAD: 2 MM; NUT QUANTITY: 1; NUT MATERIAL: MS; BOLT PROTECTIVE COATING: BLACK; SOLE SOURCE: CLYDE BERGEMANN AFRICA PTY LTD; SPECIFICATION: SABS 135	200
30	М	PIPE MTLC:88.9 MM;STL GR B ASTM A106;40	PIPE, METALLIC: NOMINAL PIPE SIZE DESIGNATION: 88.9 MM; MATERIAL: STL GR B ASTM A106; LENGTH: 6 M; WALL THICKNESS: 5.49 MM; CONSTRUCTION: SEAMLESS; END TYPE: PLAIN; SCHEDULE: 40; GRADE: B; SAME AS 55583	100
31	KG	PACKING BULK:LG 30 M;BRAIDED ROPE	PACKING, BULK: LENGTH: 30 M; MATERIAL: GLASS FIBER WOVEN BASED; TYPE: BRAIDED ROPE; TYPE SOFT WHITE, ROLL 4.5KG; SIZE 16MM DIA	20
32	EA	COUPLING SHFT FLEX:DRIVE UNIT;160 MM;560	COUPLING, SHAFT FLEXIBLE: TYPE: DRIVE UNIT; BORE DIAMETER: 160 MM; TORQUE: 560 NM; MATERIAL: STL; SPEED: 4250 RPM; REFERENCE NO: N-UEPEX/B160; CE SHAFT TO CE GEAR DRIVE COUPLING UNIT; AMBIENT TEMP: -30 TO 80DEG C; FATIGUE TORQUE: 84NM; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	16

	T = 4	Looperu:	COREEN TYPE PRECIPIETES	1 00
33	EA	SCREEN:PRECIPI	SCREEN: TYPE: PRECIPITATOR INLET;	20
		TATOR INLET;35	DIMENSIONS: WD 698 MM X LG 2.295 M X THK 3	
		MM;MS	MM; MESH SIZE: 35 MM; MATERIAL: MS;	
			DRAWING NO: ROTEK B920/75C REV 1; B920/75C	
			REV 1; EDGE 30MM HIGH X 90 DEG; VENDORS	
			ARE RESPONSIBLE FOR ENSURING THAT THEY	
			ARE PERFORMING AGAINST THE CORRECT	
			DRAWING REVISION NUMBER (IF APPLICABLE).	
34	KG	BOLT	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE;	300
		ASSY:GP;M24;	NOMINAL DIAMETER: M24; LENGTH: 125 MM;	
		LG 125	HEAD: HEX; GRADE: 4.6; MATERIAL: MS;	
		MM;HEX;4.6;MS;60	THREAD LENGTH: 60 MM; THREAD: 3 MM; NUT	
			QUANTITY: 1; NUT MATERIAL: MS; NUT GRADE:	
			4.6; BOLT PROTECTIVE COATING: BLACK;	
			SPECIFICATION: SABS 135	
35		PAD BRG:WD 60 X	PAD, BEARING: DIMENSIONS: WD 60 X LG 80 X	192
	EA	LG 80 X THK 32	THK 32 MM; MATERIAL: MS; SUPPL P/N: 583-6-0-	
		MM;MS	02; DRAWING NO: 28.45- 54321 REV 1; NEW	
			PRECIPITOR; PADS FOR ROTHEMUHLE; FREE	
			BEARING; FOR DISCHARGE FRAME RAPPING	
			SYSTEMS; FOR UNIT 1, 2, 3 AND 6; VENDORS	
			ARE RESPONSIBLE FOR ENSURING THAT THEY	
			ARE PERFORMING AGAINST THE CORRECT	
			DRAWING REVISION NUMBER (IF APPLICABLE).	
36		COMPOUND	COMPOUND, SEALING: TYPE: GASKET; COLOR:	50
	EA	SEALG:GASKET;R	RED; CONTAINER: CARTRIDGE 280 ML;	
		ED;RUBBER SI	MATERIAL: RUBBER SI; REFERENCE NO: RTV	
		,	736; HIGH TEMPERATURE SILASTIC SEALANT;	
			MATERIAL SAFETY DATA SHEETS WITH	
			ENVIRONMENTAL INFORMATION IN THE 16	
			POINT FORMAT TO BE PROVIDED WITH EVERY	
			DELIVERY AS REQUIRED BY THE	
			OCCUPATIONAL HEALTH AND SAFETY ACT	
37		BOLT	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE;	210
-	KG	ASSY:GP;M12;	NOMINAL DIAMETER: M12; LENGTH: 75 MM;	
		LG 75	HEAD: HEX; GRADE: 4.6; MATERIAL: MS;	
		MM;HEX;4.6;MS;35	THREAD LENGTH: 35 MM; THREAD: 1.75 MM;	
		,	NUT QUANTITY: 1; NUT MATERIAL: MS; NUT	
			GRADE: 4.6; BOLT PROTECTIVE COATING:	
			BLACK; SPECIFICATION SABS 135	
38		BAR FLAT:WD 100	BAR, FLAT: WIDTH: 100 MM; LENGTH: 6 M;	470
55	KG	MM;LG 6 M;THK 6	THICKNESS: 6 MM; MATERIAL: MS BS 4360;	0
		MM;EN43A	PROCESS: HOT ROLLED; GRADE: EN43A;	
		IVIIVI, LI VTO/A	WEIGHT: 4.71 KG/M; 28.26 KG/LENGTH;	
			VENDORS ARE RESPONSIBLE FOR ENSURING	
			THAT THEY ARE PERFORMING AGAINST THE	
			CORRECT DRAWING REVISION NUMBER (IF	
			APPLICABLE).	
39		BOLT	BOLT, ASSEMBLY: TYPE: GENERAL PURPOSE;	250
33	KG	ASSY:GP;M12;	NOMINAL DIAMETER: M12; LENGTH: 65 MM;	200
		LG 65	HEAD: HEX; GRADE: 4.6; MATERIAL: MS;	
		MM;HEX;4.6;MS;33	THREAD LENGTH: 33 MM; THREAD: 1.75 MM;	
		IVIIVI,□□△,4.0,IVI3,33	NUT QUANTITY: 1; NUT MATERIAL: MS; NUT	
			GRADE: 4.6; BOLT PROTECTIVE COATING:	
			BLACK; SPECIFICATION: SABS 135	
I	I		BLACK, OF LOILICATION. SADS 133	1

40	EA	BOLT U:40 MM;M10;80 MM;30 MM;1.5 MM;GMS	BOLT, U: NOMINAL SIZE: 40 MM; DIAMETER: M10; INSIDE LENGTH: 80 MM; THREAD LENGTH: 30 MM; THREAD: 1.5 MM; MATERIAL: GMS; INSIDE WIDTH: 40 MM; COMPLETE WITH WASHER AND NUT	736
41	KG	BOLT ASSY:M16;LG 180 MM;HEX;MS;2 MM;1	BOLT, ASSEMBLY: NOMINAL DIAMETER: M16; LENGTH: 180 MM; HEAD: HEX; MATERIAL: MS; THREAD: 2 MM; NUT QUANTITY: 1; BOLT PROTECTIVE COATING: BLACK; SPECIFICATION: SABS135	300
42	KG	BAR FLAT:WD 100 MM;LG 6 M;THK 6 MM;EN43A	BAR, FLAT: WIDTH: 100 MM; LENGTH: 6 M; THICKNESS: 6 MM; MATERIAL: MS BS 4360; PROCESS: HOT ROLLED; GRADE: EN43A; WEIGHT: 4.71 KG/M; 28.26 KG/LENGTH; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	300
43	EA	TAPE THRD:SEALIN G;WD 10 MM;PTFE;WHITE	TAPE, THREAD: TYPE: SEALING; WIDTH: 10 MM; MATERIAL: PTFE; COLOR: WHITE; REFERENCE NO: PTFE; WITHOUT DISPENSER; THK 0.075 MM	20
44	EA	HAMMER:PRECIPI TATOR;5.8 KG;MS;STL	HAMMER: TYPE: PRECIPITATOR; HEAD WEIGHT: 5.8 KG; HEAD MATERIAL: MS; HANDLE: STL; SUPPL P/N: 583-6-4-01; DRAWING NO: 28.45-54319 REV 1; NEW PRECIP'S; FOR DISCHARGE RAPPING SYSTEM; TYPE: ROTHEMUHLE, FOR DISCHARGE FRAMES, FOR UNIT 1,2,3 AND 6	736
45	KG	BAR FLAT:WD 50 MM;LG 6 M;THK 20 MM;43A	BAR, FLAT: WIDTH: 50 MM; LENGTH: 6 M; THICKNESS: 20 MM; MATERIAL: MS BS 4360; PROCESS: HOT ROLLED; GRADE: 43A; WEIGHT: 7.85 KG/M; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	300
46	KG	BAR FLAT:WD 100 MM;LG 6 M;THK 12 MM;9.42	BAR, FLAT: WIDTH: 100 MM; LENGTH: 6 M; THICKNESS: 12 MM; MATERIAL: MS BS 4360; PROCESS: HOT ROLLED; GRADE: EN43A; WEIGHT: 9.42 KG/M; REFERENCE NO: 43A; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	300
47	EA	REDUCER PIPE:CONCENTRI C;25 X 15 MM;FNPT	REDUCER, PIPE: TYPE: CONCENTRIC; NOMINAL SIZE: 25 X 15 MM; CONNECTION: FNPT; MATERIAL: STL GALV; SPECIFICATION: SABS 509-1955 TABLE 15; SOCKET, FEMALE THREAD	64
48	KG	PLATE MTL:MS;235.5 KG;HOT ROLLED;EN43A	PLATE, METAL: DIMENSIONS: WD 1.2 M X LG 2.5 M X THK 10 MM; MATERIAL: MS; WEIGHT: 235.5 KG; PROCESS: HOT ROLLED; SPECIFICATION: BS 4360-1972 TABLE 6; GRADE: EN43A	471

49		BRUSH	BRUSH, PAINT: TYPE: SETTER; WIDTH: 25 MM;	20
	EA	PAINT:SETTE R;WD 25 MM;FLAT;PLASTIC	MATERIAL: BRISTLE CHINESE PURE; SHAPE: FLAT; HANDLE: PLASTIC; SIZE: 48MM LG X 16MM THK; THE ITEM MUST BE PROTECTIVE PACKED	
50	KG	BAR SQ:WD 12 MM;LG 6 M;MS;HOT ROLLED	BAR, SQUARE: WIDTH: 12 MM; LENGTH: 6 M; MATERIAL: MS; PROCESS: HOT ROLLED; GRADE: EN43A; WEIGHT: 1.13 KG/M; REFERENCE NO: BS4360; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	4
51	KG	BOLT ASSY:M12;LG 45 MM;HEX;MS;1.75 MM;1	BOLT, ASSEMBLY: NOMINAL DIAMETER: M12; LENGTH: 45 MM; HEAD: HEX; MATERIAL: MS; THREAD: 1.75 MM; NUT QUANTITY: 1; BOLT PROTECTIVE COATING: BLACK; SPECIFICATION: SABS135: 1985	600
52	EA	SPROCKET:32;OD 200 MM;60 MM;20 MM;170 MM	SPROCKET: TEETH: 32; OUTSIDE DIAMETER: 200 MM; BORE: 60 MM; PITCH: 20 MM; ROOT DIAMETER: 170 MM; MATERIAL: STL; SUPPL P/N: 583-6-0-07 3/4"; FOR THE NEW PRECIPITORS DRIVES, FOR UNIT 1, 2, 3 AND 6 OF THE DRIVE MOTOR	16
53	EA	BRG RLR:SELF ALIGNING;ID 65 MM;OD 120 MM	BEARING, ROLLER: TYPE: SELF ALIGNING; INSIDE DIAMETER: 65 MM; OUTSIDE DIAMETER: 120 MM; WIDTH: 31 MM; ROW: DOUBLE; SUPPL P/N: 22213 AKE 4C3; NOTE: THE REFERENCE NUMBER MUST BE CAST AND NOT ENGRAVED ON BEARING AND ORIGINAL PACKED	32
54	KG	CLOTH:CLEANING ;COTTON	CLOTH: TYPE: CLEANING; MATERIAL: COTTON; GRADE:QT, STERILIZED, CLEAN SCOURED, LIGHT AND MEDIUM COLOURED GRADE, PACKED IN 5KG BALES; SIZE: IRREGULAR	100
55	KG	ANGLE STRCTRL:80 MM;6 MM;LG 6 M;MS;7.34	ANGLE, STRUCTURAL: LEG LENGTH: 80 MM; MATERIAL THICKNESS: 6 MM; LENGTH: 6 M; MATERIAL: MS; PROCESS: HOT ROLLED; WEIGHT: 7.34 KG/M; SPECIFICATION: BS 4360; GRADE: EN43A; 44.04KG/LENGTH	20
56	EA	ANVIL:DISCHARG E ELECTRODE;28- 45-54005	ANVIL: TYPE: DISCHARGE ELECTRODE; DRAWING NO: 28-45- 54005 REV 1; PRECIPITATOR; ALL BOLT CONNECTIONS TO BE WELDED; FOR COMPLETE UNIT; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	736
57	EA	PENETRANT:FLUI D;CAN 350 ML	PENETRANT: TYPE: FLUID; CONTAINER: CAN 350 ML; REQUIRED THE NEW STANDARD FOR RELIABILITY POINT 1 TO 16 MATERIAL SAFETY DATA SHEET WITH EVERY DELIVERY COMPULSORY	25
58	М	CHAIN:WELD;ID 5.5 X OD 22.4	CHAIN: TYPE: WELD; DIMENSIONS: ID 5.5 X OD 22.4 MM; MATERIAL: STL; LENGTH: 30 M; SUPPL P/N: L56; LONG LINK TYPE	60

MM;STL;LG 30

SUPPLY AND DELIVERY OF UNIT 5 ELECTROSTATIC PRECIPITATOR (ESP) MECHANICAL SPARES ON AN "AS AND WHEN

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REQUIRED BASIS" AT K	RIEL	. POW	ER S1	TATI(	ON FOR	A PEF	RIOD OF	4 MONTHS

59	EA	SLEEVE ADPTR:BEARING; 60 MM;LG 50 MM;STL	SLEEVE, ADAPTOR: TYPE: BEARING; SHAFT SIZE: 60 MM; LENGTH: 50 MM; MATERIAL: STL; SUPPL P/N: H313; SUPPLIER NOTE - THE ITEM MUST BE ORIGINAL PROTECTIVE PACKED AND MARKED; OD 65MM; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	16
60	EA	WASHER LK:ID 8.6 MM;OD 12.8MM;THK 2 MM	WASHER, LOCK: INSIDE DIAMETER: 8.6 MM; OUTSIDE DIAMETER: 12.8 MM; THICKNESS: 2 MM; NOMINAL SIZE: M8; MATERIAL: SPRING STL; TYPE: HELICAL SPRING, SPLIT	1000
61	EA	SHEET GSKT:THK 3 MM;LG 2 M;WD 1.5 M	SHEET, GASKET: THICKNESS: 3 MM; LENGTH: 2 M; WIDTH: 1.5 M; MATERIAL: NBR/WOOL MINERAL FIBER; SUPPL P/N: WEBA6000; SUPPLIER NOTE ONLY BURGMANN BRAND ACCEPTABLE, STEAM APPLICATION: PEAK TEMPERATURE: 440 DEG C, CONTINIOUS TEMPERATURE; 350 DEG C, TEMPERATURE WITH STEAM; 300 DEG C, PRESSURE: 120 BAR/1740 PSI	2
62	EA	FILTER ELMNT:OIL;ID 57 X OD 130 X LG 197	FILTER, ELEMENT: TYPE: OIL; DIMENSIONS: ID 57 X OD 130 X LG 197 MM; MATERIAL: PAPER; FILTERING RETENTION: 25 UM; SUPPL P/N: 12070; FOR FAWCETT UNIT F/B200, TYPE FILTAMATIX, NOTE: ITEM MUST BE MARKED FOR IDENTIFICATION AND ORIGINAL PACKED	60
63	KG	ANGLE STRCTRL:76 X 50 MM;6 MM;LG 6 M;MS	ANGLE, STRUCTURAL: LEG LENGTH: 76 X 50 MM; MATERIAL THICKNESS: 6 MM; LENGTH: 6 M; MATERIAL: MS; PROCESS: HOT ROLLED; WEIGHT: 5.65 KG/M; SPECIFICATION: BS 4360; GRADE: EN43A; 33.9KG/LENGTH	300
64	KG	SHEET MTL:WD 1.225 M;LG 2.45 M;THK 3 MM	SHEET, METAL: WIDTH: 1.225 M; LENGTH: 2.45 M; THICKNESS: 3 MM; MATERIAL: MS GR EN43A; FABRICATION METHOD: HOT ROLLED; SPECIFICATION: BS 4360; 1 EACH= 72.38 KG	800
65	EA	HOOD:WD 280 X LG 265 X THK 4 MM;PTFE	HOOD: SIZE: WD 280 X LG 265 X THK 4 MM; MATERIAL: PTFE; REFERENCE NO: H00D; TEFLON; FOR ELECTROSTATIC PRECIPITATORS; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	64
66	М	UNION PIPE:25 MM;FPT;STL GALV;SABS 763	UNION, PIPE: SIZE: 25 MM; CONNECTION: FPT; MATERIAL: STL GALV; SPECIFICATION: SABS 763	180
67	KG	WASHER FLAT:M12;ID 13.5 MM;24 MM;THK 2.5	WASHER, FLAT: NOMINAL SIZE: M12; INSIDE DIAMETER: 13.5 MM; OUTER SIZE: 24 MM; THICKNESS: 2.5 MM; MATERIAL: MS BLACK; SPECIFICATION: BS 1449 PART 3B	300
68	EA	TEE PIPE:25 MM;FBSP;STL GALV	TEE, PIPE: SIZE: 25 MM; CONNECTION: FBSP; MATERIAL: STL GALV	25

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69	М	PIPE MTLC:80 MM;CS ASTM A106;LG 6 M;5.49	PIPE, METALLIC: NOMINAL PIPE SIZE DESIGNATION: 80 MM; MATERIAL: CS ASTM A106; LENGTH: 6 M; WALL THICKNESS: 5.49 MM; CONSTRUCTION: SEAMLESS; END TYPE: PLAIN; SCHEDULE: 40; GRADE: B; 88.9MM OD	100
70	KG	PLATE MTL:WD 1.2 M X LG 2.5 M X THK 6 MM	PLATE, METAL: DIMENSIONS: WD 1.2 M X LG 2.5 M X THK 6 MM; MATERIAL: MS BS 4360, SABS 1431; WEIGHT: 141.3 KG; PROCESS: HOT ROLLED; GRADE: 300WA EN43A	6000
71	EA	GEARBOX:MOTO R;3800:1;0.36 RPM;0.37-51 KW	GEARBOX: TYPE: MOTOR; RATIO: 3800:1; SPEED: 0.36 RPM; POWER: 0.37-51 KW; SUPPL P/N: 583-6-0-01; NEW PRECIP'S, FOR THE COLLECTOR AND DISCHARGE RAPPERS, FOR UNIT 1,2,3 AND 4; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	16
72	EA	BRG BAL:CONRAD; DOUBLE SEAL;ID 40 MM	BEARING, BALL: TYPE: CONRAD; STYLE: DOUBLE SEAL; INSIDE DIAMETER: 40 MM; OUTSIDE DIAMETER: 90 MM; WIDTH: 23 MM; ROW: SINGLE; SUPPL P/N: 6308-2RS; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	48
73	EA	SEAL OIL:ID 40 MM;OD 52 MM;WD 7 MM;YES	SEAL, OIL: INSIDE DIAMETER: 40 MM; OUTSIDE DIAMETER: 52 MM; WIDTH: 7 MM; MATERIAL: RUBBER SYNTHETIC; SEALING MEMBER: SINGLE LIP; SPRING LOADED: YES; SUPPL P/N: SM40527	30
74	EA	BUSH:CONICAL RAPPER BAR;ID 17 MM;OD 80	BUSH: TYPE: CONICAL RAPPER BAR; INSIDE DIAMETER: 17 MM; OUTSIDE DIAMETER: 80 MM; LENGTH: 28 MM; MATERIAL: MS; APPLICATION: PRECIPS; SPECIFICATION: SABS 3184 GR 300WA; DRAWING NO: 0.45/58907 REV 1; MATERIAL / TECHNICAL DATA SETS TO BE PROVIDED WITH THE ORDER SUPPLIERS TO USE DRAWING NUMBER OR THE LATEST VERSION	7520
75	EA	COUPLING SHFT:UNIVER SAL;60 MM;OD 92 MM	COUPLING, SHAFT: TYPE: UNIVERSAL; BORE: 60 MM; OUTSIDE DIAMETER: 92 MM; LENGTH: 65 MM; MATERIAL: STL; SUPPL P/N: KTQ2-456D; KTQ2-123D; PRECIPITATOR TORQUE INSULATOR	32
76	EA	SHEET GSKT:THK 2 MM;LG 2 M;WD 1.5 M	SHEET, GASKET: THICKNESS: 2 MM; LENGTH: 2 M; WIDTH: 1.5 M; MATERIAL: NBR/WOOL MINERAL FIBER; SUPPL P/N: WEBA6000; SUPPLIER NOTE ONLY BURGMANN BRAND ACCEPTABLE, STEAM APPLICATION: PEAK TEMPERATURE; 440 DEG C, CONTINIOUS TEMPERATURE; 350 DEG C, TEMPERATURE WITH STEAM; 300 DEG C, PRESSURE: 120 BAR/1740 PSI	2

SUPPLY AND DELIVERY OF UNIT 5 ELECTROSTATIC PRECIPITATOR (ESP) MECHANICAL SPARES ON AN "AS AND WHEN

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REQUIRED BASIS" AT KRIE	POWER STATION FOR	A PERIOD OF 4 MONTHS

77	EA	ANVIL:DISCHARG E ELECTRODE	ANVIL: TYPE: DISCHARGE ELECTRODE; SUPPL P/N: 583-6-5- 01; DRAWING NO: 28.45-54320 REV 1; NEW PRECIP'S; FOR PRECIPITATOR DISCHARGE FRAMES; FOR UNIT 1,2,3 AND 6; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	736
78	EA	LINK CHN TXMSN:CONNECT ING;STL;20 MM	LINK, CHAIN TRANSMISSION: TYPE: CONNECTING; MATERIAL: STL; PITCH: 20 MM; FASTENING METHOD: SPRING CLIP; SUPPL P/N: K16140; EACH COMPLETE WITH 0.75 IN PITCH, FOR USE WITH LONG STROKE SOOTBLOWERS	32
79	EA	HAMMER:COLLEC TOR;4;STL;STL	HAMMER: TYPE: COLLECTOR; HEAD WEIGHT: 4; HEAD MATERIAL: STL; HANDLE: STL; COMPLETE WITH LEVER, FULLCRUM BOLT, HARDENED BUSHES, FOR BRANDT PRECIPITATORS; 270MM	752
80	EA	COUPLING: NEUPEX A;160MM;CAST IRON;108	COUPLING: TYPE: NEUPEX A; SIZE: 160 MM; MATERIAL: CAST IRON; CONNECTION 1 SIZE: 108 MM; CONNECTION 2 SIZE: 160 MM; PART1:	16
81	EA	BRG BAL:CONRAD; SHIELD;ID 60 MM;OD 130 MM	BEARING, BALL: TYPE: CONRAD; STYLE: SHIELD; INSIDE DIAMETER: 60 MM; OUTSIDE DIAMETER: 130 MM; WIDTH: 31 MM; ROW: SINGLE; SUPPL P/N: 6312-Z; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	32
82	KG	BAR RD:12MM;LG 6 M;MS BS 4360;EN43A	BAR, ROUND: NOMINAL DIAMETER: 12 MM; LENGTH: 6 M; MATERIAL: MS BS 4360; PROCESS: HOT ROLLED; GRADE: EN43A; WEIGHT: 0.88 KG/M	3
83	KG	PLATE MTL:WD 1.2 M X LG 2.5 M X THK 8 MM	PLATE, METAL: DIMENSIONS: WD 1.2 M X LG 2.5 M X THK 8 MM; MATERIAL: MS BS 4360, SABS 1431; WEIGHT: 188.4 KG; PROCESS: HOT ROLLED; GRADE: 300WA EN43A	40
84	EA	SEAL OIL:PILLOW BLOCK;RUBBER	SEAL, OIL: TYPE: PILLOW BLOCK; MATERIAL: RUBBER; SUPPL P/N: TSN 515G; U-LOCK, FOUR HALFS PER SEALED PACKED	16
85	EA	FRAME:RIGID;LG5 100 X HT11707;MILD STEEL	FRAME: TYPE: RIGID; SIZE: LG5100 X HT11707; MATERIAL: MILD STEEL; DRAWING NO: 28.45/52884; FOR MANUFACTURING REFER TO DRAWING; MATERIAL CERIFICATE 3.2 TO BE MADE AVAILABLE	184
86	EA	PLATE:CORRUGA TED SHEET;CARBON STEEL. PLATE: TYPE: CORRUGATE D SHEET; DIMENSIONS: LG482 X HT13000	PLATE: TYPE: CORRUGATED SHEET; DIMENSIONS: LG482 X HT13000 XTHK1.6 MM; MATERIAL: CARBON STEEL; DRAWING NO: 0.45/57218; MATERIAL CERTIFICATE 3.1	1880

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		XTHK1.6 MM; MATERIAL: CARBON STEEL; DRAWING NO: 0.45/57218; MATERIAL CERTIFICATE 3.1		
87	EA	HOUSING BRG UNIT:PILLOW;ID 67 MM;CI	HOUSING, BEARING UNIT: TYPE: PILLOW; BORE: ID 67 MM; MATERIAL: CI; SUPPL P/N: SNL511-609; SUPPLIER NOTE: THE ITEM MUST BE COMPLETE WITH A GREASE NIPPLE INSTALLED AND SHAFT SEALS.; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	16
88	EA	SPROCKET:19;OD 122 MM;40 MM;20 MM;STL	SPROCKET: TEETH: 19; OUTSIDE DIAMETER: 122 MM; BORE: 40 MM; PITCH: 20 MM; MATERIAL: STL; TYPE: CHAIN; SUPPL P/N: ES-881; 3/4 INCH BS PITCH X 40MM BORE; FOR PRECIPITATOR MECHANICAL DISCHARGE SYSTEM	24
89	KG	BAR RD:60 MM;LG 6 M;MS BRIGHT;MACHINE D	BAR, ROUND: NOMINAL DIAMETER: 60 MM; LENGTH: 6 M; MATERIAL: MS BRIGHT; PROCESS: MACHINED; GRADE: EN3A; WEIGHT: 22 KG/M; SPECIFICATION: BS 970 (070M20); DRAWING NO: 0.45/23544 REV 0; FABRICATE SLOTTED KEYWAYS ACCORDING TO ESKOM DRAWING NUMBER; SHAFT TO BE CUT AND TRIMMED ON SITE DURING INSTALLATION	28
90	EA	HAMMER:COLLEC TOR;4 LB;STL;STL	HAMMER: TYPE: COLLECTOR; HEAD WEIGHT: 4 LB; HEAD MATERIAL: STL; HANDLE: STL; DRAWING NO: 13,45/477 REV 0; COMPLETE WITH LEVER, FULLCRUM BOLT, HARDENED BUSHES, FOR BRANDT PRECIPITATORS; 270MM, QCP TO BE SUBMITTED TO CLIENT, SIMPE PROJECT PLAN TO BE SUBMITTED TO CLIENT, KICK-OFF MEETING IS REQUIRED	752
91	L	CLEANER:DEGRE ASER;LIQD;DRUM 20 KG	CLEANER: TYPE: DEGREASER; FORM: LIQUID; CONTAINER: DRUM 20 KG; INDUSTRIAL SOFT SOAP; REQUIRE A MATERIAL SAFETY DATA SHEET WITH EVERY DELIVERY	25
92	KG	BAR RD:16 MM;LG 6 M;MS BS 4360;EN43A	BAR, ROUND: NOMINAL DIAMETER: 16 MM; LENGTH: 6 M; MATERIAL: MS BS 4360; PROCESS: HOT ROLLED; GRADE: EN43A; WEIGHT: 1.58 KG/M	32
93	EA	REDUCER PIPE:CONCEN TRIC BELL;100 X 80 MM	REDUCER, PIPE: TYPE: CONCENTRIC BELL; NOMINAL SIZE: 100 X 80 MM; CONNECTION: BW; MATERIAL: STL; SCHEDULE: 40	32
94	EA	NIPPLE PIPE:BARREL;ID 80 MM;LG 102 MM	NIPPLE, PIPE: TYPE: BARREL; INSIDE DIAMETER: 80 MM; LENGTH: 102 MM; CONNECTION: THD; MATERIAL: STL; RATING: 4830 KPA; SPECIFICATION: SABS 62; MALE THREADED BOTH ENDS	100

95	EA	SUPPORT:INSULA TOR;DIA 188 X LG 485 MM	SUPPORT: TYPE: INSULATOR; DIMENSIONS: DIA 188 X LG 485 MM; MATERIAL: PORCELAIN; REFERENCE NO: MPM 02-2575	64
96	L	PAIINT OIL: ZN CHROMAT	PAINT, OIL: TYPE: ZN CHROMATE; COLOR: RED OXIDE; CONTAINER: CAN 5 L; FINISH: GLOSS; SPECIFICATION: SABS 684-1972; SABS 679 TYPE 1; REFERENCE NO: A. 362-0814; WITH ALKYD BASED, MATERIAL SAFETY DATA SHEETS THAT COMPLIES WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT'S REGULATIONS TO BE SUPPLIED, NO SUBSTANCES AND/OR INGREDIENTS THAT FALL UNDER TABLE 1 CATAGORY WILL BE USED, ANY CHEMICAL FALLING UNDER TABLE 3 OF THE SAME REGULATIONS SHALL NOT BE USED, SHALL BE BIODEGRADABLE AND OZONE FRIENDLY, COPY OF MSDS TO BE SENT TO MEDICAL CENTRE AND SAFETY RISK	30
97	KG	BOLT MACH:M10;LG 12 MM;HEX;SS GR 316	BOLT, MACHINE: DIAMETER: M10; LENGTH: 12 MM; HEAD: HEX; MATERIAL: SS GR 316; THREAD: 1.5 MM	100
98	EA	GEARBOX:RAPPE R;0.18 KW;R73R40DT63N 4	GEARBOX: TYPE: RAPPER; POWER: 0.18 KW; REFERENCE NO: R73R40DT63N4; PRECIP WIRE; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	16
99	L	THINNER PAINT:LACQUER; CAN 5 L	THINNER, PAINT: TYPE: LACQUER; CONTAINER: CAN 5 L; REFERENCE NO: A; ILS; SHOULD COMPLY WITH THE CHEMICAL HAZARDOUS SUBSTANCES REGULATION OF OCCUPATIONAL HEALTH AND SAFETY ACT; REQUIRED A MATERIAL SAFETY DATA SHEET WITH EVERY DELIVERY	30
100	KG	ANGLE STRCTRL:100 MM;10 MM;LG 6 M;CS;15	ANGLE, STRUCTURAL: LEG LENGTH: 100 MM; MATERIAL THICKNESS: 10 MM; LENGTH: 6 M; MATERIAL: CS; PROCESS: HOT ROLLED; WEIGHT: 15 KG/M; SPECIFICATION: BS 4360; GRADE: EN43A; 90 KG PER LENGTH	450
101	EA	CE RAPPER BAR UNIT	BAR: TYPE: FLAT; DIMENSIONS: WD90XLG6035 X HT 80 X THK 10 MM; MATERIAL: CARBONSTEEL; GRADE:1215; RAPPERBARCONSIST OF 8 ITEMS; 2 OFF 6M FLAT BAR BY 10	188
102	EA	CE PLATE STABILIZER	BRACKET: TYPE: FLAT; MATERIAL: CARBONSTEEL; DIMENSIONS: WD 58 X LG 5005XHT50XHK5MM; THEBRACKETHASTEN (10) INSERTS WHICH ARE 500 MM APART.BRACKETSUPPORTLUGS: BRACKETCONSISTOF 3 ITEMS 1 FLAT BAR AND2OFFSUPPORTLUGS (LG 40 X HT 40 X THK 3 MM)	188
103	EA	CE PLATE TOP BUSHING		3760

104	EA	CE PLATE STABILIZER BRACKET LUG	BRACKETSUPPORTLUGS: BRACKETCONSISTOF 3 ITEMS 1 FLAT BAR AND 2 OFFSUPPORTLUGS (LG 40 X HT 40 X THK 3 MM)	376
105	EA	CE CARRIER BEAMS (1ST FIELD ONLY)	ANGLE, STRUCTURAL: LEG LENGTH: 100 MM; MATERIAL THICKNESS: 10 MM; LENGTH: 6 M; MATERIAL: CS; PROCESS: HOT ROLLED; WEIGHT: 15 KG/M; SPECIFICATION: BS 4360; GRADE: EN43A; 90 KG PER LENGTH	188
106	KG	BOLT ASSY:GP;M30X12 5MM;HEX;8.8;MS		250
107	KG	BOLT ASSY:GP;M20X13 0MM;HEX;8.8;MS		250
108	KG	BOLT ASSY:GP;M16X10 0MM;HEX;8.8;MS CARRIER BEAM BOLTS		650
109	KG	BOLT ASSY:GP;M12X12 0MM;HEX;8.8;MS		200
110	KG	BOLT ASSY:GP;M24X10 0MM;HEX;8.8;MS		200
111	KG	BOLT ASSY:GP;M12X40 MM;HEX;8.8;MS		200
112	KG	BOLT ASSY:GP;M12X18 0MM;HEX;8.8;MS		200
113	KG	BOLT ASSY:GP;M12X50 MM;HEX;8.8;MS		250
114	KG	BOLT ASSY:GP;M12X75 MM;HEX;8.8;MS		200
115	EA	M16 SQAURE WASHERS		1000
116	EA	DE BEARING CARTRIDGE UNIT		16
117	EA	NOZZLES - QUARTER INCH		128
118	EA	M16 KNOD LOCK		152
119	EA	DE SPLIT BUSHING		64

# 2.1 Purchaser's design

Not applicable for this scope.

# 2.2 Procedure for submission and acceptance of Supplier's design

- a) All materials are fabricated and/or manufactured in accordance with an accepted design standard.
- b) All materials technical documents are accepted by Eskom prior to commencement with manufacturing or fabrication
- c) The supply of components shall include material certification in line with the design code and standard
- d) The Supplier must provide the data sheets for all materials supplied.
- e) All materials are delivered with relevant material certificates.
- f) All materials are packaged accordingly such thar mechanical damage to components is avoided.
- g) Damaged materials due to the fault of the Supplier are corrected at Supplier's cost
- h) All intervention points and data books are supplied for all materials as signed off in line QCPs.

#### **Steel Work Fabrication**

- a) All work is required to be in accordance with the latest edition of SANS 2001-CS1
- b) All dimensions are required to be verified by the supplier.
- c) All welds are required to be inspected using visual aids and relevant NDE.
- d) Welded connections are required to be welded all around with a minimum of 6 mm fillet welds or the appropriately designed fillet weld size. Butt welds are required to be full penetration welds.

The table below indicates particular specifications pertaining to SANS 2001-CS1 and must be read in conjunction with the code. This specification will be applied to the manufacturing of the discharge and collecting electrode as a minimum.

Clause	Particular Specification
4.1	Materials
4.1.1	Add the following:  • All structural steelwork is required to be grade S355JR
4.1.4.1	Electrodes for electric welding are required to be E7018.
3 4.1.5.1	Ordinary bolts to be grade 8.8 with class 8 nuts, as a minimum
4.6	Workmanship - Erection
4.6.5	On site welding is not permitted
5.3	Non-destructive testing of welds
5.3.3	Fillet welds are required to undergo magnetic particle inspection (MPI).
5.3.4	All butt welds and full penetration welds are required to undergo ultrasonic non-destructive testing (100 % of welds)

# 2.3 Other requirements of the Supplier's design

The supplier and/or manufacturer is required to produce and/or re-produce drawings of the following components:

PAGE 16

- Collector Electrode (CE) plate
- Discharge Electrode (DE)
- Rapper bar
- Carrier Beam
- Stabiliser Bracket
- Discharge Electrode (DE) Hammer
- Collecting Electrode (CE) hammer
- DE hammer anvils
- CE pedestal unit
- · CE and DE shaft
- DE Split Bush bearing.
- CE top Bushing

# 2.4 Use of Supplier's design

All drawings produced by the supplier must be verified by Eskom for acceptance. Once accepted, the manufacturing of those components may proceed.

#### 2.5 Manufacture & fabrication

As stipulated in section 2.2 above.

# 2.6 Factory acceptance testing (FAT)

As a minimum section 2.3 above must be met in conjunction with factory acceptable standards.

#### 2.7 Other tests and inspections and commissioning in place of use

Not applicable for this scope.

#### 2.8 Operating manuals and maintenance schedules.

Not applicable for this scope.

# 3. Supply Requirements.

- a) The supplier to provide data sheets for all the materials supplied.
- b) Supplier to confirm delivery lead time of items upon receipt of order.
- c) All materials must be delivered at Kriel Power Station.
- d) The Supplier to ensures the material are delivered during working hours and reasonable time must be allocated for gate access, off-loading, paperwork processing. Working Hours for Kriel Power Station are as follows: Monday to Thursday 07h00 to 16h15 and Friday 07h00 to 12h00.
- e) Where deliveries are to be made outside the working ours, the Supplier need to confirm the availability of Kriel Power Station Receiving personnel and the relevant QC personnel before dispatching the items.
- f) The Supplier to be prepared to provide materials within an acceptable delivery period.
- g) Acceptance of this tender is subject to the condition that both the contracting company's management and its employees will provide Eskom with a clear criminal record not older than thirty (30) days from a reputable screening company. If the principal contractor appoints a subcontractor, the same provisions and measures will apply to the subcontractor. Acceptance of the tender is also subject to the condition that the contractor will implement all such security measures for the safe performance of the work as required in the scope of the contract. For the purpose of clarity, contractors who was previously found guilty of offences in terms of the National Road Traffic Act 93 of 1996 and/or has paid guilt admission fines, will be exempted and be allowed to access site.

# 4. Specification of the services to be provided.

As stipulated in section 2.2 above.

# 5. Constraints on how the Supplier Provides the Goods

# **5.3 Programming constraints**

- a) The Supplier submits a program as per the agreed lead times during negotiations which covers all milestones of the manufacturing process up to delivery to site.
- b) Program in Primavera Project P6 XER and PDF format showing activities of all the project work to be done by the contractor, and the other work covered by the contract that is being done by subcontractors (i.e. is the entire scope of the works represented).
- c) The schedule show a logical links/ sequence/ relationships that connect the various activities together.
- d) The CPM (Critical Path Method) technique is used for programme and planning.
- e) The programme has in it, Milestone dates (Procurement and Equipment delivery dates), hold-points for approving of the works by the Employer's professional team (i.e. key milestones are incorporated into programme).
- f) Works are to be completed within accepted durations that are consistent with key dates provided in the contract data.

# 5.4 Work to be done by the Delivery Date

Quality Control inspections to be done on the material prior to formally receiving them at Kriel Power Station.

# 5.5 Marking the goods

The marking required as a minimum is to stamp/mark the following:

- Material Grade
- Material Name
- Material dimensions.

#### 5.6 Constraints at the delivery place and place of use

- a) All deliveries should be arranged to be within Kriel Power Station normal working hours as stipulated in section 3 of this document.
- b) Kriel Power Station site access will be adhered to. The Supplier informs the Purchaser timeously to make all necessary arrangement.

#### 5.7 Cooperating with Others

- a) The Supplier cooperates with the Kriel Power Station and QC personnel during delivery.
- b) The Supplier cooperates with the Purchasers team in ensuring that the materials are delivered in accordance to all the requirements

#### 5.8 Management meetings

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:
Overall contract progress and feedback	As and when urgent need arises	Either face to face or virtual at a convenient venue	Purchaser, Supplier, and Cross functional team members

Meetings of a specialist nature may be convened as specified elsewhere in this Goods Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the manufacture of the *goods*. Records of these meetings shall be submitted to the *Supply 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.

#### 5.9 Documentation control

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 email itself.

The manufacturing data books shall be submitted in hardcopy and soft copy format. The following documentation shall form part of the manufacturing data book as a minimum:

- a. General Arrangement drawing
- b. Material Certificates
- c. Non-Destructive Test reports
- d. Manufacturing QCP's (All fully signed)

# 5.10 Health and safety risk management

#### General

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

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

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

#### The Contractor ensures compliance with, amongst others:

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

- b) The latest versions of standards, procedures, specifications, rules, systems of works and requirements of the Employer, copies of which will be provided to the Contractor on request. Refer to Section 6.
- c) The Health and Safety Plan prepared by the Contractor in accordance with the Employer's Safety Health and Environmental Specification TBC and requirements.
- d) The provisions of the National Environmental Management Act (as amended) and all regulations in force from time to time in terms of that Act, including Record of Decisions Kriel waste management procedure-RER 0221, Kriel Environmental Non-conformances, corrective and preventive measures and all applicable environmental legislations.

(The documentation referred to in paragraphs 2.3.1 (a) (b) (c) and (d) are collectively referred to as the Safety Health and Environmental requirements and forms a part of the contract Works Information.)

The Contractor ensures that its employees, agents, Subcontractors and mandatories comply with the provisions of the Occupational Health and Safety Act, No. 85 of 1993, and all applicable regulations binding in terms thereof as well as the Employer's Safety Health and Environmental Specification whilst making use of plant, materials and equipment and whilst at the Site for any reason whatsoever.

The Contractor implements a comprehensive health and safety management system, based on the OHSAS 18001: 2007 requirements for utilisation at the project.

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

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

#### 6.9.2 Mandatory Agreements

The Contractor confirms that:

- a) In terms of sections 37(1) and 37(2) of the OHSA, the Employer is relieved of any and all of its responsibilities and liabilities pertaining to the activities performed by the Contractor (and its employees, agents, Subcontractors and mandatories) relating to the works; the use of plant, materials and equipment; and whilst at the Site for whatsoever reason.
- b) The Contractor confirms that, in terms of the Construction Regulations, regulation 6, it is hereby mandated as the designer and must perform all duties required of a designer. (This will be applicable only where the Contractor is required to do design works as part of their Scope).
- c) The Contractor confirms that he has been provided with sufficient information regarding the health and safety arrangements applicable to the works, the use of Plant, Materials and Equipment, as well as at the Site.

#### In addition, the Contractor shall ensure that:

- a) Prior to the Contractor commencing with any operations/ activities relating to the works and/or prior to gaining access to the Site, the Contractor concludes a written mandatory agreement with the Employer in terms of section 37(2) of the OHSA and 5(1)(k) under the construction regulations. The aforementioned agreement constitutes a record of the written arrangements and procedures between the Contractor and Employer regarding health and safety.
- b) As far as is reasonably practicable, the safety and absence of risks to health in connection with the production, processing, use, handling, storage or transport of articles or substances is maintained.

- c) As far as is reasonably practicable, all hazards pertaining to the health and safety of persons and harm to the environment that are attached to any works which is performed, any article or substance which is produced, processed, used, handled, stored or transported and any plant or machinery which is used in its business, is clearly identified and, as far as is reasonably practicable, further establishes what precautionary measures should be taken with respect to such works, article, substance, plant or machinery in order to protect the health and safety of persons and or harm to the environment, and provides the necessary means to apply such precautionary measures;
- d) Such information, instructions, training and supervision as may be necessary to ensure, as far as is reasonably practicable, the health and safety at works of its employees, agents, Subcontractors and mandatories is provided.
- e) As far as is reasonably practicable, no employee, agent, Subcontractor and mandatory performs any works or produces, processes, uses, handles, stores or transports any article or substance or operates any plant or machinery, unless the precautionary measures contemplated in paragraph 2.3.3, or any other precautionary measures which may be prescribed have been taken.
- f) Such measures as may be necessary in the interest of health and safety and the environment are enforced.
- g) Works is performed, and that plant, materials or equipment is used under the direct supervision of a person trained to understand the hazards associated with it and who has the authority to ensure that precautionary measures required by the Employer are implemented; and
- h) All employees are informed of the scope of their authority as contemplated in OHSA.
- i) Ensures that all statutory appointments (as required in terms of the Occupational Health and Safety Act, No. 85 of 1993 and all applicable regulations binding in terms thereof, as amended) and other appointments required in terms of the Employer's Safety Health and Environmental Specification 240-127760320 and SHE Requirements Procedure (32–726) are in place and that all appointees are cognisant of their duties and responsibilities in terms of such appointments.
- j) Ensures that such appointees execute their duties and responsibilities as required by such an appointment.
- k) Ensures that all personnel brought by itself onto site (including employees of Contractors and Subcontractors) are suitably qualified and trained for the performance of the task, duties and functions, which will be allocated to them.
- Ensures that all personnel brought by itself onto site (including employees of Contractors and Subcontractors) are suitably qualified and trained for the performance of the task, duties and functions, which will be allocated to them.
- m) Ensures that all personnel brought by itself onto site (including employees of Contractors and Subcontractors) are suitably qualified and trained for the performance of the task, duties and functions, which will be allocated to them.
- n) Conducts a risk assessment regarding the utilisation of PPE and thereafter ensure that PPE of good quality is issued (at its own cost) to its employees, agents, Contractors, Subcontractors and mandatories prior to such individuals accessing the site, alternatively performing activities related to the works at the site, as specified in the Eskom PPE Specification 240-44175132.
- o) Immediately reports any occupational or other injuries, near miss events, property damage, environmental related incidents as well as any potential threat to the health and safety of individuals at the works or on the site, as soon as he becomes aware thereof, to the Project Manager.

p)

#### **Environmental constraints and management**

The Contractor provides an Environmental Management Plan (EMP) applicable to their scope of work. The plan provides a guideline on the environmental management of the handling of the works. All waste introduced and/or produced on the Employer's premises by the Contractor for this contract is handled in accordance with the minimum requirements for the Handling and Disposal of Hazardous Waste in terms of Government Legislation as proclaimed by the Department of Water Affairs and Forestry and Employer's environmental requirements. The Contractor conforms to the "polluter pays principle", duty of care and other NEMA principles.

All environmental incidents are reported to the Employer within 24 hours of such occurrence. All environmental incidents occurring on the Project Site (or on any other places, if any, as may be specified under the Contract as forming part of the Site) are recorded, detailing how each incident was dealt with in an Environmental Incident register.

SUPPLY AND DELIVERY OF UNIT 5 ELECTROSTATIC PRECIPITATOR (ESP) MECHANICAL SPARES ON AN "AS AND WHEN

REQUIRED BASIS" AT KRIEL POWER STATION FOR A PERIOD OF 4 MONTHS

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

The Contractor conforms to all requirements dictated in the document "Environmental Management Programme for the Kriel Power Station, Kriel Waste Management Procedure - RER 0221, Kriel Environmental Non-conformances, corrective and preventive measures as well as the National Environmental Management Act (NEMA, Act No. 107 of 1998) and the National Environmental Management Waste Act (NEMWA, Act No. 59 of 2008). This is achieved by undertaking inspections, audits, monitoring and reviews, conducted internally by the Contractor and externally by the Project Manager.

The Contractor conducts their environmental management based on the ISO 14001:2004 requirements and implement their environmental management practices accordingly.

The Contractor develops and implements as a minimum the following procedures:

- Environmental Management Plan,
- Spill Management Procedure,

All environmental procedures, as listed above, shall be site-specific and submitted to the Employer for acceptance by the Project Manager before the commencement of construction activities.

The Employer will provide a copy of the environmental authorisation and Environmental Management Plan to the contractor for the drafting of the above procedures.

#### 5.11 Quality

- a) Quality Control Plan (QCP) must be approved by both the Suppliers. Eskom engineer and QC before commencing with manufacturing of the ordered items. Material certificates, mechanical testing certificate and NDT certificates should be part of the data package accompanying the QCPs.
- b) The Supplier must comply with Eskom's Supply Quality Management Specification (Document No: 240-105658000, Category 2 Quality Requirements).
- c) The supplier shall complete and sign Form A (Enquiry/Contract/Quality Requirements for Supplier Quality Management Specification 240-105658000/ QM 58 and ISO 9001).
- d) The supplier shall submit objective evidence of a developed, implemented and maintained QMS that complies with ISO 9001 or any applicable standard of quality management system (the latest applicable revision). The following documents (approved/ signed copies) shall be submitted:
  - Quality Management System manual or a documented information that have defines and describes the QMS and its scope
  - Quality Policy, aligned with the supplier's strategic direction (documented information)
  - Quality Objectives (documented information)
  - Control of documented information (both maintain and retain documented information)
  - Internal audit procedure (documented information)
  - Control of nonconforming outputs (documented information)
  - Nonconformity and Corrective action procedure (documented information)

The QMS should drive all the supplier's business management processes to ensure that all of Eskom's requirements are fully met on a consistent basis.

- e) The supplier shall submit the latest copy of the management system internal audit reports. The audit reports must include, if applicable, nonconformity identified, and the resulting remedial actions (correction and/ or corrective action reports).
- f) The supplier shall submit a draft contract quality plan that is specific to the scope of work as described in the tender documents. The plan must address the minimum requirements as per ISO 10005.
- g) Where applicable; the supplier shall submit an example of inspection and test plan (ITP) or quality control plan (QCP) on similar or previous work done.
- h) The supplier shall submit documented information for Control of Externally Provided Processes, Products and Services.
- i) The supplier shall submit a copy of documented information for roles, responsibilities and authorities in relation to the QMS. Examples of relevant documented information are; organization charts, job descriptions, work instructions, duty statements, manuals, procedures.
- j) The supplier shall submit documented information retained (records) of management review meetings that include agenda, meeting minutes, attendance registers, reports, presentations, etc.

# 5.12 Invoicing and payment

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

The *Supplier* shall address the tax invoice to *Purchaser* and include on each invoice the following information:

- Name and address of the Supplier and the Supply Manager:
- The contract number and title;
- Supplier's VAT registration number;
- The *Purchaser's VAT* registration number.
- Description of goods and services provided for each item invoiced based on the Price Schedule;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

# 5.13 Insurance provided by the *Purchaser*

The change management process to be followed as per the core clause 16.1. Any verbal instruction/communication must be backed with a written instruction; the use of minutes, letters or emails is accepted. Any communication must go through the purchaser's manager

### 5.14 Contract change management

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

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

#### 5.15 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 *Supplier* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

PAGE 23

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

# 5.16 Records of Defined Cost, payments & assessments of compensation events to be kept by the *Supplier*

Will be conducted as per Eskom assessments, invoicing and payment procedure and requirements.

#### 6. Procurement

### 6.3 Subcontracting

#### 6.3.1 Preferred subcontractors

Not applicable for this scope.

#### 6.3.2 Limitations on subcontracting

Not applicable for this scope.

#### 6.3.3 Spares and consumables.

Not applicable for this scope.

#### 6.3.4 Other requirements related to procurement.

Not applicable for this scope.

# 6.3.5 Cataloguing requirements by the Supplier

Not applicable for this scope.

# 7. List of drawings

# 7.3Drawings issued by the Purchaser

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

Drawing number	Revision	Title
28.45/57218	01	Boiler 1 to 6 Precipitator shaft bracket details
0.45/33326	03	Unit 1 to 6 Precipitator wire rapper anvil assembly
28.45/52884	01	Unit 3 Precips Discharge frame
0.45/58907	01	Unit 1 to 6 Precipitator Conical Rapper Bar Bushes
28.45/54319	01	Unit 4 & 6 Precips Discharge Rapping Hammers
0.45/57218	01	Precips CE Gearbox Shaft Drive Train Base

# C3.2 SUPPLIER'S GOODS INFORMATION

This section of the Goods Information will always be contract specific depending on the nature of the *goods* and *services*.

It is most likely to be required for supply contracts where the tendering supplier will have proposed specifications and schedules for the *goods* and *services*, which once accepted by the *Purchaser* prior to award of contract now become obligations of the *Supplier* per core clause 20.1.