



NEC3 Engineering & Construction Contract

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

and **[Insert at award stage]**
(Reg No. _____)

for **Supply and Install Turbine control system hydraulic accumulators for Unit 1-6 at Lethabo power station.**

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CONTRACT No. [Insert at award stage]

Part C1: Agreements & Contract Data

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C1.1 Form of Offer & Acceptance

Offer

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

Supply and Install Turbine control system hydraulic accumulators for Unit 1-6 at Lethabo power station.

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

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

Options A	The offered total of the Prices exclusive of VAT is	R [•]
	Sub total	R [•]
	Value Added Tax @ 15% is	R [•]
	The offered total of the amount due inclusive of VAT is ¹	R [•]
	(in words) [•]	

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

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number (if applicable)

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

Acceptance

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

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

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

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

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

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

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the *Employer* in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

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

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

Note:

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

No.	Subject	Details
1	[•]	[•]
2	[•]	[•]

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

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

For the tenderer:

For the *Employer*

Signature

Name

Capacity

On behalf
of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name &
signature
of witness

Date

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

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

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option	A: Priced contract with activity schedule
	and secondary Options	W1: Dispute resolution procedure
		X1: Price adjustment for inflation
		X2 Changes in the law
		X5: Sectional Completion
		X7: Delay damages
		X18 Limitation of liability
		Z: Additional conditions of contract
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1	The <i>Project Manager</i> is: (Name)	
	Address	Lethabo Power Station Deneysville Rd Viljoensdrift
	Tel	

Fax

e-mail

10.1	The <i>Supervisor</i> is: (Name)		
	Address	Lethabo Power Station Deneysville Rd Viljoensdrift	
	Tel No.		
	e-mail		
11.2(13)	The <i>works</i> are	Supply, deliver and install the Turbine control system hydraulic accumulator, safety block and piping for Unit 1-6.	
11.2(14)	The following matters will be included in the Risk Register	See risk management in part 3	
11.2(15)	The <i>boundaries of the site</i> are	Areas associated with the scope of work to be performed as per the works information.	
11.2(16)	The Site Information is in	Part 4: Site Information	
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.	
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa	
13.1	The <i>language of this contract</i> is	English	
13.3	The <i>period for reply</i> is	1 week	
2	The Contractor's main responsibilities	Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.	
3	Time		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	36 months after <i>Starting date</i>	
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date
		Sectional Completion	As per X5.1 below
30.1	The <i>access dates</i> are:	Part of the Site – As per SOW	Date –10 June 2025
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	2 weeks after Contract award.	
31.2	The <i>starting date</i> is	TBC	

32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	1 week during execution, monthly prior execution.
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	As stated above and X5.1 Section completion date
4	Testing and Defects	
42.2	The <i>defects date</i> is	52 weeks after Section Completion of the works.
43.2	The <i>defect correction period</i> is	Two weeks
5	Payment	
50.1	The <i>assessment interval</i> is	The 25th day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	4 weeks.
51.4	The <i>interest rate</i> is	<p>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</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.</p>
6	Compensation events	
60.1(13)	<p>The place where weather is to be recorded is:</p> <p>The <i>weather measurements</i> to be recorded for each calendar month are,</p>	<p>Lethabo Power Station Deneysville Rd Viljoensdrift</p> <p>the cumulative rainfall (mm)</p> <p>the number of days with rainfall more than 10 mm</p>

the number of days with minimum air temperature less than 0 degrees Celsius

the number of days with snow lying at 09:00 hours South African Time

The *weather measurements* are supplied by

South African Weather Bureau

The *weather data* are the records of past *weather measurements* for each calendar month which were recorded at:

Vaal triangle

and which are available from:

the South African Weather Bureau and included in Annexure A to this Contract Data provided by the *Employer*

60.1(13)	Assumed values for the ten year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are:	As stated in Annexure A to this Contract Data provided by the <i>Employer</i>.
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 and insurance	
80.1	These are additional <i>Employer's</i> risks	Refer to risk register
84.1	The <i>Employer</i> provides these insurances from the Insurance Table	as stated for "Format A" <i>http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx</i> (See Annexure B for basic guidance) The <i>Contractor's</i> liability for payment of the <i>Employer's</i> insurance deductible shall be limited to the relevant deductibles payable in terms of the relevant insurance policy as at Contract Date.
84.1	The <i>Contractor</i> provides these additional insurances:	as stated for "Format A" <i>http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx</i> (See Annexure B for basic guidance) The <i>Contractor's</i> liability for payment of the <i>Employer's</i> insurance deductible shall be limited to the relevant deductibles payable in terms of the relevant insurance policy as at Contract Date.
84.2	The insurance against loss of or damage to the <i>works</i> , Plant and Materials is to include cover for Plant and Materials provided by the <i>Employer</i> for an amount of	Replacement including the amount stated in the contract data for the replacement of any plant and materials provided by the <i>Employer</i>
84.2	The minimum limit of indemnity for insurance in respect of loss of or damage	

	to property (except the <i>works</i> , Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract for any one event is	Whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> .
84.2	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands).
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
10	Data for main Option clause	
A	Priced contract with activity schedule	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
11	Data for Option W1	
W1.1	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 www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See www.ice-sa.org.za) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	Arbitration.
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	
	- if the arbitration procedure does not state who selects an arbitrator, is	The Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.

12	Data for secondary Option clauses			
X1	Price adjustment for inflation			
X1.1(a)	The <i>base date</i> for indices is		05 April 2025	
X1.1(c)	The proportions used to calculate the Price Adjustment Factor are:	proportion	linked to index for	Index prepared by
		0.1	non-adjustable	
	Total	1.00		
X2	Changes in the law		There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.	
X5	Sectional Completion			
X5.1	The <i>completion date</i> for each <i>section</i> of the <i>works</i> is:	Section	Description	Completion date
		1	Unit 1 Completion	07/12/2026
		2	Unit 2 Completion	21/07/2025
		3	Unit 3 Completion	26/04/2027
		4	Unit 4 Completion	15/05/2026
		5	Unit 5 Completion	11/01/2026
		6	Unit 6 Completion	20/12/2027
X7	Delay damages (but not if Option X5 is also used)			
X7.1	Delay damages for Completion of the whole of the <i>works</i> are	0.25 % of the total order value of the delay per day up to the maximum of 15%		
X16	Retention			
X16.1	The <i>retention free amount</i> is	R0.00		
	The <i>retention percentage</i> is	5% of every payment made		

X18	Limitation of liability	
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	R0.0 (zero Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	<p>the amount of the deductibles relevant to the event described in the insurance policy format selected in the data for clause 84.1 above, which policy is available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx</p>
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	<p>The total of the Prices other than for the additional excluded matters.</p> <p>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</p> <p>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</p> <ul style="list-style-type: none"> • Defects due to manufacture and fabrication outside the Site, • loss of or damage to property (other than the works, Plant and Materials), • death of or injury to a person and • infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	<p>(i) Seven years after the <i>defects date</i> for latent Defects and</p> <p>(ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.</p> <p>A latent Defect is a Defect which would not have been discovered on reasonable inspection by the <i>Employer</i> or the <i>Supervisor</i> before the <i>defects date</i>, without requiring any inspection not ordinarily carried out by the <i>Employer</i> or the <i>Supervisor</i> during that period. If the <i>Employer</i> or the <i>Supervisor</i> do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the <i>Employer</i> or the <i>Supervisor</i> to have discovered the Defect.</p>
Z	The <i>Additional conditions of contract</i> are	Z1 to Z12 always apply.
Z1	Cession delegation and assignment	

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

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

Z2 Joint ventures

Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.

Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Project Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.

Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

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

Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.

Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project Manager*.

Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.

Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Ethics

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

Z4.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Works if the *Contractor* (or any member of the *Contractor* where the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations) is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices.

Such practices include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the *Employer* or other people or organisations and including in circumstances where the *Contractor* or any

such member is removed from the an approved vendor data base of the *Employer* as a consequence of such practice.

- Z4.3 Notwithstanding the provisions of core clause 90.2, the procedures on termination in terms of this clause are P1, P2 and P3 as stated in the core clause 92 and the amount due is A1 and A3 as stated in core clause 93.

Z5 Confidentiality

- Z5.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z5.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Project Manager*.
- Z5.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z5.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z5.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z6 Waiver and estoppel: Add to core clause 12.3:

- Z6.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

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

- Z7.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
 - undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules,

guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

- Z7.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

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

- Z8.1 Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z8.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z8.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z9 Notifying compensation events

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

Z10 Employer's limitation of liability

- Z10.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z10.2 The *Contractor's* entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer's* liability under the indemnity is limited.

Z11 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

- Z11.1 or had a business rescue order granted against it.

Z12 Addition to secondary Option X7 Delay damages (if applicable in this contract)

- Z12.1 If the amount due for the *Contractor's* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Contractor's* obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

Annexure A: One-in-ten-year-return *weather data* obtained from SA Weather Bureau for [weather station]

If any one of these *weather measurements* recorded within a calendar month, before the Completion Date for the whole of the *works* and at the place stated in this Contract Data is shown to be more adverse than the amount stated below then the *Contractor* may notify a compensation event.

	<i>Weather measurement</i>				
Month	Cumulative rainfall (mm)	Number of days with rain more than 10mm	Number of days with min air temp < 0 deg.C	Number of days with snow lying at 08:00 CAT	[Other measurements if applicable]
January	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
February	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
March	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
April	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
May	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
June	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
July	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
August	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
September	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
October	To be obtained from SA	To be obtained from	To be obtained from	To be obtained from	

	weather Bureau	SA weather Bureau	SA weather Bureau	SA weather Bureau	
November	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	
December	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	To be obtained from SA weather Bureau	

Only the difference between the more adverse recorded weather and the equivalent measurement given above is taken into account in assessing a compensation event.

Annexure B: Insurance provided by the *Employer*

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

1. For the purpose of *works* contracts, insurance provided by Eskom (the *Employer*) has been arranged on the basis of “project” or “contract” value, where the value is the total of the Prices at Completion of the whole of the *works* including VAT.

A “project” is a collection of contracts or work packages to be undertaken as part of a single identified capital expansion or refurbishment of a particular asset or facility.

A “contract” is a single contract not linked to or being part of a “project”.

2. For ECC3 there are three main “formats” of cover and deductible structure; Format A, Format B and Format Dx.

Format A is for a project or contract value less than or equal to R350M (three hundred and fifty million Rand) inclusive of VAT.

3. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 84.2. In terms of clause 84.1 “the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide”. Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
4. When the Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom’s Marine Policies Procedures found at internet website given below.
5. **Further information and full details of all Eskom provided policies and procedures may be obtained from:**

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

C1.2 Contract Data

Part two - Data provided by the *Contractor*.

Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)² in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 156 to 158 of the ECC3 (April 2013) Guidance Notes.
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	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications: Experience:	

² Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see www.ecs.co.za

		CV's (and further key persons data including CVs) are appended to Tender Schedule entitled _____.		
11.2(3)	The <i>completion date</i> for the whole of the works is			
11.2(14)	The following matters will be included in the Risk Register			
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:			
31.1	The programme identified in the Contract Data is			
A	Priced contract with activity schedule			
11.2(20)	The <i>activity schedule</i> is in	(in figures) (in words), excluding VAT		
11.2(30)	The tendered total of the Prices is			
	Data for Schedules of Cost Components	<i>Note "SCC" means Schedule of Cost Components starting on page 60, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC3 (April 2013).</i>		
A	Priced contract with activity schedule	Data for the Shorter Schedule of Cost Components		
41 in SSCC	The percentage for people overheads is:	%		
21 in SSCC	The published list of Equipment is the last edition of the list published by The percentage for adjustment for Equipment in the published list is	Minus %		
22 in SSCC	The rates of other Equipment are:	Equipment	Size or capacity	Rate
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates. Please insert another schedule if foreign resources may also be used	Category of employee		Hourly rate
62 in SSCC	The percentage for design overheads is	%		

63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are include in Defined Cost are:	
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PART 2: PRICING DATA
ECC3 Option A

Document reference	Title	No of pages
	This cover page is	1
C2.1	Pricing assumptions: Option A	2
C2.2	The <i>activity schedule</i>	3
	Total number of pages	6

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, (ECC3) Option A states:

Identified and defined terms	11	
	11.2	(20) The Activity Schedule is the <i>activity schedule</i> unless later changed in accordance with this contract.
		(27) The Price for Work Done to Date is the total of the Prices for <ul style="list-style-type: none"> • each group of completed activities and • each completed activity which is not in a group. <p>A completed activity is one which is without Defects which would either delay or be covered by immediately following work.</p>
		(30) The Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

This confirms that Option A is a lump sum form of contract where the work is broken down into activities, each of which is priced by the tendering contractor as a lump sum. Only completed activities are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date.

Function of the Activity Schedule

Clause 54.1 in Option A states: "Information in the Activity Schedule is not Works Information or Site Information". This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Activity Schedule but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Activity Schedule. The Activity Schedule is only a pricing document.

Link to the programme

Clause 31.4 states that "The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance". Ideally the tendering contractor will develop a high level programme first then resource each activity and thus arrive at the lump sum price for that activity both of which can be entered into the *activity schedule*.

Preparing the *activity schedule*

Generally it is the tendering contractor who prepares the *activity schedule* by breaking down the work described within the Works Information into suitable activities which can be well defined, shown on a programme and priced as a lump sum.

The *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in his *activity schedule* and be priced accordingly.

It is assumed that in preparing his *activity schedule* the *Contractor*:

- Has taken account of the guidance given in the ECC3 Guidance Notes pages 19 and 20;
- Understands the function of the Activity Schedule and how work is priced and paid for;
- Is aware of the need to link the Activity Schedule to activities shown on his programme;
- Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate activity within the Prices of other listed activities in order to fulfil the obligation to complete the *works* for the tendered total of the Prices.
- Understands there is no adjustment to the lump sum Activity Schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event.

An activity schedule could have the following format:

C2.2 the *activity schedule*

Item No	Activity Description	Qty (total)	Rands (each)	Rands (total)
1	General			
1.1	Site Establishment (considering weather conditions and storage)	Sum		
1.2	P & G's			
1.3	Compilation & Approval of Safety File prior to commencement of project	Sum		
1.4	Site de-establishment	Sum		
1.5	Data packs (for full execution of works) at completion of each section.			
1.6	Training			
2	Supply and deliver Material Unit 1 - 6			
2.1	Supply and deliver a bladder type and bottom repairable accumulator with a maximum operating pressure of greater than 4.2 Mpa, and a maximum operating temperature of 70 degree Celsius. Port size: DN32 to DN50 (Sizes out of this range will not be accepted). Gas port: Standard. Connection to accumulator: standard adapter. Material: Fluid port- Stainless steel, Shell- Stainless steel, and Bladder- phosphate ester resistant (e.g. Butyl). The accumulators have been classified as Category IV according to SANS 347.	Sum		
2.2	Supply and deliver safety block comprising of basic safety valve with manual operated pressure release valve, fluid: Phosphate ester, max operating pressure: higher than the max operating pressure of the accumulator, max operating temperature: 70°C, and size: main shut-off valve DN32 (minimum). Connection to pipe: Union coupling or Banjo fitting. Connection to accumulator: standard adapter. Material: Block- Stainless steel, and Seals- phosphate ester resistant (e.g. EPDM). Accessories: Lockable main shut-off valve	Sum		
2.3	Union couplings to connect the safety block to the NB32 stainless steel piping. Union couplings/banjo fittings to connect the safety block to the NB15 stainless steel piping. NB32 schedule 40 stainless steel piping NB15 schedule 40 stainless steel piping 90° NB32 schedule 40 stainless steel bends 90° NB15 schedule 40 stainless steel bends NB32 schedule 40 stainless steel nozzle/stub NB15 schedule 40 stainless steel nozzle/stub Associated bracketing and ancillaries for mounting purposes of the accumulator. Refer to section 3.13.4 for detailed specifications.	Sum		
3	Installation and Commissioning Unit 1 - 6			

3.1	Installation and Commissioning of a bladder type and bottom repairable accumulator with a maximum operating pressure of greater than 4.2 Mpa, and a maximum operating temperature of 70 degree Celsius. Port size: DN32 to DN50 (Sizes out of this range will not be accepted). Gas port: Standard. Connection to accumulator: standard adapter. Material: Fluid port- Stainless steel, Shell- Stainless steel, and Bladder- phosphate ester resistant (e.g. Butyl). The accumulators have been classified as Category IV according to SANS 347.	Sum		
3.2	Installation and Commissioning safety block comprising of basic safety valve with manual operated pressure release valve, fluid: Phosphate ester, max operating pressure: higher than the max operating pressure of the accumulator, max operating temperature: 70°C, and size: main shut-off valve DN32 (minimum). Connection to pipe: Union coupling or Banjo fitting. Connection to accumulator: standard adapter. Material: Block- Stainless steel, and Seals- phosphate ester resistant (e.g. EPDM). Accessories: Lockable main shut-off valve	Sum		
	TOTAL (excl VAT)			
	TOTAL (incl. VAT)			
	NOTES:			
	1. Please refer to minimum quantities in Part C3.1 (Appendix I) for base equipment requirements.			

Part 3: Scope of Work

Document reference	Title	No of pages
C3.1	This cover page <i>Employer's Works Information</i>	1
C3.2	<i>Contractor's Works Information</i>	
	Total number of pages	32

C3.1: EMPLOYER'S WORKS INFORMATION

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APPENDIX A : VENDOR DOCUMENT SUBMITTAL SCHEDULE

APPENDIX B : "AS REQUIRED" ISOMETRIC DRAWINGS

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1. Introduction

This document contains the works information for the Lethabo Turbine Control System Hydraulic Accumulator Installation Project. The detail design was performed in-house as well as the sizing of the accumulator. The *Contractor* shall be responsible for the procurement, supply and installation of the components required as part of the scope of work.

2. Supporting Clauses

2.1 Scope

This document covers the applicable work to be done, as well as the requirements and specifications regarding the work.

2.1.1 Purpose

The aim of this document is to provide the *Contractor* with all the details required to perform the work as defined in the scope.

2.1.2 Applicability

This document shall apply to the Lethabo Turbine Control System Hydraulic Accumulator Installation Project and to the *Contractor* for the *Works*.

2.2 Normative and Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

Not applicable

2.2.2 Informative

Document title	Document number
[1] Occupational Health and Safety Act of 1993	OHSACT
[2] Standard Specification for the Categorization and Assessment Conformity Pressure Equipment – Pressure Equipment Regulations	SANS 347

Table 1 – Applicable Standards and Codes

Document title	Document number
[3] Metallic products. Types of inspection documents	BS EN 10204
[4] Metallic industrial piping	BS EN 13480
[5] Seamless steel tubes for pressure purposes-Technical delivery conditions Part 5 : Stainless steel tubes	BS EN 10216-5

Table 2 – Applicable Eskom Documents

Document title	Document number
[6] Eskom Design Review Procedure	240-53113685
[7] Coding and Labelling Standard	240-40643427
[8] Specification for the Identification of the Contents of Pipelines and Vessels	240-114767031
[9] Steam Turbine Protection Functions - Requirements and Control Standard	240-56030575
[10] Standard for Welding Requirements on Eskom Plant	240-106628253
[11] High Energy Pipework Standard for Eskom Power Plants	240-56239129
[12] Standard for Non-Destructive Testing (NDT) on Eskom Plant Processes on Eskom Plant Standard	240-83539994
[13] Engineering Drawing Standard-Common Requirements	240-86973501
[14] Material Specification and Certification Guideline for Power Generation Plant	240-84513751
[15] Procurement of High Pressure Pipework and Boiler Tubing Material Standard in the Generation Division	240-87733094
[16] Supplier Quality Management Specification	240-105658000
[17] Standard for the External Corrosion Protection of Plant, Equipment and Associated Piping with Coatings	240-106365693
[18] Structural Design and Engineering Standard	240-56364545
[19] Constructability Assessment Guideline	240-107981296

2.3 Definitions

2.3.1 Disclosure Classification

Controlled disclosure: controlled disclosure to external parties (either enforced by law, or discretionary).

Table 3 – Definition of Terms

Term	Definition
Latest	When referring to a revision of a document or standard, this shall mean the Most recent version of same to have been published before contract placement.
Nozzle	Refers to a nozzle on a branch on a pipe as applicable.
Stub	Refers to a stub on a branch on a pipe as applicable.

Abbreviations

Abbreviation & Acronyms	Description
AIA	Authorised Inspection Authority
CAR	Corrective Action Reports
FRF	Fire Resistant Fluid
NCR	Non-conformance Report
NDT	Non Destructive Test
OHS	Occupational Health and Safety
PER	Pressure Equipment Regulations
PMA	Particular Material Appraisal
QA	Quality Assurance
QC	Quality Control
QCP	Quality Control Procedure
WPS	Welding Procedure Specification

3. Works information

3.1 General Requirements

1. The *Contractor* is responsible for the procurement, supply, installation and commissioning of all items stipulated in section 3 of this document (hereafter referred to as "*the Works*") according to the applicable codes and standards and the requirements in this document. In addition, the *Contractor* shall be responsible for the disposal of all waste material resulting from the installation of the new equipment. All waste to be disposed as per the Lethabo Power Station Waste Management Work instruction (LBE 22004) and according to waste regulations.
2. All requirements in this document also apply to any subcontractor appointed by the *Contractor* if applicable.
3. Areas where cutting or welding are to be done shall be thoroughly cleaned beforehand.
4. It is the *Contractor's* responsibility to ensure that all items installed/modified as per this document shall work as required. Any additional work or items to be installed to fulfil this requirement is the responsibility of the *Contractor* and shall be held to the same requirements as items specified in this document.
5. The *Contractor* shall provide training to the station personnel regarding the operating and maintenance of the accumulator and safety block.

3.2 Safety Requirements

1. The *Contractor* shall comply with the latest revision of the Eskom Generation Plant Safety Regulations and stipulations of the Occupational Health and Safety (OHS) Act.

3.3 Welding Requirements

1. The following requirements are applicable for all welding:
 - a. All welding shall be performed in accordance with 240-106628253 Standard for Welding Requirements on Eskom Plant.
 - b. All welding documentation shall be subject to acceptance by an Eskom Welding Engineer and Welding Inspector, in accordance with all current Eskom standards.
2. The specifications in this document are made without knowing the location of all welds on pipework. It is the *Contractor's* responsibility to inspect areas near where work is to be done to ensure that weld proximity is not a concern (4 times wall thickness distance between weld toes).

3.4 NDT Requirements

1. The *Contractor* is responsible for performing all Non-destructive Testing (NDT) as specified in this document and as required by law or applicable health and safety standard.
2. NDT shall only be performed by an Employer approved NDT company's level 2 NDT technicians. The Eskom NDT standard to be followed is 240-83539994 Standard for Non-Destructive Testing (NDT) on Eskom Plant.
3. NDT shall be done on all welds and shall consist of 100% surface and 100% volumetric testing where possible and shall be indicated as such in the Quality Control Procedure (QCP). The criteria of BS EN 5817, Class B shall apply.

3.5 Material Requirements

1. The *Contractor* is responsible for supply of all material and consumables required for the completion of the Works.
2. Materials installed as part of the *Works* shall be grade 316 L stainless steel. The EN designation is X2CrNiMo17-12-2 (EN number 1.4404).
3. Material procurement and certification shall be in accordance with 240-87733094. Unless otherwise specified in this document, EN 10204 "3.1" material certificates are required as a minimum.
4. All gaskets and seals shall be compatible with FRF.
5. Material selections, where specified in this document, are made taking price and availability into account. These serve as a guideline and the *Contractor* is encouraged to select alternative materials to reduce cost or lead times. The following rules apply:
 - Alternative material shall be pressure equipment grade material of an applicable EN, BS or ASME standard and shall have specified properties at the applicable design temperature.
 - The material shall be one frequently used by the *Employer* for pressure equipment on the turbine plant.
 - The material selection is subject to approval by the *Employer's* engineer and it is solely his discretion to accept alternatives. The *Contractor* may motivate his selections.
 - Minimum allowable thickness calculations shall be done to ensure that the material selection is acceptable for the specific design conditions.
6. In terms of EN 13480, materials not in an EN-harmonised standard require the pressure equipment manufacturer (the *Contractor*) to supply a Particular Material Appraisal (PMA).

7. This PMA shall form part of the *Works* documentation.
8. All costs relating to production of a PMA (including possible testing) are for the *Contractor*.

3.6 Piping Requirements

1. All pipework modifications and new pipework installations are to be executed in accordance with the latest revision of EN 13480.
2. Where pipes of different wall thicknesses are welded, the requirements of 240-56239129, High Energy Pipework Standard for Eskom Power Plants Section 3.16 applies.

3.7 Fittings/coupling Requirements

1. Banjo fittings may only be used for the NB15 line connections to the safety blocks but not on the NB32 line connections.
2. The union coupling or banjo fitting shall be forged from stainless steel and shall be of a pressure rating equal or higher than the pressure rating of the relevant piping/system. All new piping is rated schedule 40 therefore the minimum rating for the fittings/couplings shall be schedule 40 or higher.
3. All selected couplings or fittings shall be suitable for use in and environment where FRF (Castrol Anvol PE46 XC) is used.

3.8 Quality Requirements

1. The Eskom Supplier Quality Management: Specification 240-105658000 shall be followed for all quality requirements.
2. No work shall be done without a QCP that is accepted by the *Employer*. A QCP shall therefore be submitted to the *Employer* for each item installed as per Section 3.12, before that part of the work is to be commenced. The *Employer* requires 5 days for QCP approval.
3. Each QCP shall contain a space, separate from the individual intervention points, where the names of the nominated quality representative from each party shall print their names and sign next to it; this is to aid signature identification.
4. Intervention points shall be signed as the work progresses and no back-dating shall be allowed.
5. Notification for interventions to be in writing and to be done at least 24 hours in advance for interventions on Lethabo site and at least 72 hours in advance for work outside Lethabo site.
6. QCP's and related documentation shall be subject to comment and acceptance by the *Employer's* quality control personnel.
7. QCP's shall make provision for signatures for interventions by at least the *Contractor's* Quality Control (QC) representative, the *Employer's* engineering department and the site Authorised Inspection Authority (AIA) representative.
8. The following minimum hold points shall be included for the *Employer's* Quality Control department:
 - Initial acceptance of QCP's
 - Marking of cut lines

- Final inspection
 - Review of NDT reports
 - Conformity check on material certificates and heat numbers
 - PMA reviews (if applicable)
 - Final data book review
 - Alignment and fit-up of piping before any welding.
9. Where this document is not clear about the location of an item to be installed or work to be done, or the details of work to be done, it is the *Contractor's* responsibility to determine the correct location or details of work from the *Employer's* engineering representatives, and the *Contractor* shall only act upon confirmation by receipt of an Engineering Instruction via the Project Manager. Incorrectly positioned items, or incorrect work done (where Engineering Instructions were not issued) shall be moved, removed, replaced, changed and/or reinstalled as applicable by the *Contractor* at his cost.
10. The *Contractor* is responsible for determining whether items as stipulated by this document shall fit into the existing plant. If not, the *Contractor* is to propose a solution, which shall be subject to the *Employer's* acceptance.

3.9 Design Requirements

The following system parameters are applicable:

- Fluid: FRF (Castrol Anvol PE46 XC)
- Piping design pressure:
 - 4.2MPa (supply piping -SC11)
 - 0.3MPa (return piping - SC29)
- Design temperature: 70°C

3.9.1 Drawings

1. For all drawings, the requirements of 240-86973501 apply.
2. The *Employer* shall provide the *Contractor* with the "As Required" isometric drawing, refer to Appendix B.
3. If for any reason changes need to be made to the "As Required" isometric drawings the *Contractor* shall inform the *Employer* of those changes for acceptance before any work shall commence.
4. After the *Works* have been completed, detailed "As-built" drawings shall be provided by the *Contractor*.
5. "As-built" drawings are subject to the *Employer's* comments and acceptance.
6. Pipework drawings shall be presented on isometrics containing piping specifications and dimensions for easy reference. Dimensioning shall show all lengths and angles.
7. To aid in the production of the drawings, the *Contractor* may request copies of the existing equipment's original drawings from the *Employer's* library, however, the availability and accuracy of current plant drawings cannot be guaranteed and it remains the responsibility of the *Contractor* to produce the design drawings according to the requirements. Any costs associated with this, including measurements taken of the equipment, shall be for the *Contractor*.
8. The following general requirements apply to the drawings:
 - The drawings to be good quality engineering drawings which are to be squad-checked by the *Contractor's* QC representatives and be free of errors and omissions.
 - Space to be provided for Employer acceptance, as well as AIA approvals.
 - Weld positions shall be indicated on weld maps for all welds, from where each weld shall be traceable to the weld specific Welding Procedure Specification (WPS).
9. All drawing revisions shall be provided as paper copies or in .pdf format. Final as-built drawings shall be provided as paper copies and .pdf. All paper copies shall be in the original (in all cases at least A3) size.

3.10 Pressure Equipment Requirements

1. For work done on pressure equipment, the *Contractor* shall act as the manufacturer, with the relevant responsibilities assigned in terms of the Pressure Equipment Regulations (PER). For existing pressure equipment, the *Contractor* shall only be responsible for his area of work, and not the entire pressure equipment.
2. The *Contractor* shall supply the relevant PER certificates and material certificates for the accumulators and safety blocks.

3.11 Documentation Requirements

1. All documents supplied by the *Contractor* shall be of good quality and are subject to the Employer's acceptance. Documents such as QCP's, Method Statements and other documents impacting the work shall be accepted by the *Employer* at least 1 week prior to commencement of the *Works*.
2. Each revision of a document or drawing shall be accompanied by a list of the comments made by the *Employer* and the response/corrective action taken by the *Contractor*. Changes shall be recorded in a revision table contained on/in each drawing/document.
3. Documents and drawings include the *Employer's* drawing number as allocated by the *Employer*. Blocks of numbers may be periodically requested by the *Contractor*.
4. The *Contractor* may have his own document or drawing number on the document or drawing, but where reference is made among documents and/or drawings, the *Employer's* number shall be used.
5. The *Contractor* shall compile a complete data book containing the following as a minimum:
 - All cutting instructions.
 - All inspection reports.
 - All detailed design drawings and sub-assembly drawings
 - NDT procedures and operator qualifications
 - Signed NDT reports.
 - Repair procedures
 - Weld procedures (WPS's and Procedure Qualification Records (PQR's)) and welder qualifications
 - Weld summary that gives full traceability between the weld maps, NDT reports, the welder and the
 - WPS used.
 - All weld maps.
 - Material summary that gives full traceability between drawings and material certificates
 - All mechanical and chemical test reports as per EN 10204, for pipes / valves and fittings
 - A section that includes copies of all relevant qualifications and approvals of NDT, Quality Assurance
 - (QA), QC, and any artisan / welder performing as required by Employer's specifications and / or statutory requirements.
 - The manufacturer's / repairer's certificate as defined in PER.
 - Any documentation that was generated to perform an activity to be fully trace-able by paper trail – throughout the activity from inception to completion.
 - Pipe ovality reports.
 - All Non-conformance Reports (NCR's)/Corrective Action Reports (CAR's)
 - Technical specifications
 - Operating and maintenance manuals for the accumulator
6. Furthermore, each safety block shall be supplied with a data book that is traceable to the specific safety block, containing the following as a minimum:
 - QCP for the valve
 - Material list and material certificates according to EN 10204.
 - WPS and welding documentation as applicable
 - Inspection reports and procedures
 - NDT reports and procedures
 - Pressure test certificates (with calibration certification)
 - Maintenance and operating manual or similar documentation
 - Leak test report, if applicable
 - Technical specifications

3.12 Commissioning Requirements

1. The *Contractor* shall be responsible for the commissioning of the new equipment with the assistance of the *Employer's* personnel.
2. The *Contractor* shall provide the commissioning and test plan for the *Employer's* review before any tests are performed. As a minimum the operation of the accumulator shall be tested by performing a control oil pump changeover test, on each of the units, to confirm that the control oil pressure is sustained successfully.
3. The operation of the safety block shall be tested and demonstrated to the *Employer's* personnel by the *Contractor*.

3.13 Mechanical work to be done.

The *Contractor* shall supply and install the following on each of the six (6) units:

- 1 x Accumulator (56 litre) and associated bracketing and ancillaries for mounting purposes.
- 1 x Safety block
- 1 x union coupling to connect safety block to NB32 stainless steel pipe.
- 1 x union coupling/banjo fitting to connect safety block to NB15 stainless steel pipe.
- 5m x NB32 schedule 40 stainless steel piping (as per the unit specific isometric drawings)
- 4 x 90° NB32 schedule 40 stainless steel bends
- 1 x NB32 schedule 40 stainless steel nozzle/stub
- 6m x NB15 schedule 40 stainless steel piping (as per the unit specific isometric drawings)
- 3 x 90° NB15 schedule 40 stainless steel bends
- 1 x NB15 schedule 40 stainless steel nozzle/stub

Note: In case there aren't any 56 litre accumulators available in the market then the *Contractor* shall notify the *Employer* of the available size accumulators. The *Employer* shall then advise on the way forward.

In total:

- 6 x Accumulators (56 litre) and associated bracketing and ancillaries for mounting purposes.
- 6 x Safety blocks
- 6 x union couplings to connect the safety block to the NB32 stainless steel piping
- 6 x union couplings/banjo fittings to connect the safety block to the NB15 stainless steel piping
- 30m x NB32 schedule 40 stainless steel piping
- 24 x 90° NB32 schedule 40 stainless steel bends
- 6 x NB32 schedule 40 stainless steel nozzles/stubs
- 36m x NB15 schedule 40 stainless steel piping
- 18 x 90° NB15 schedule 40 stainless steel bends
- 6 x NB15 schedule 40 stainless steel nozzles/stubs

3.13.1 Accumulators

The accumulators supplied by the *Contractor* shall conform to the following specifications:

- Design: Bladder type, bottom repairable
- Max operating pressure: Accumulator with maximum operating pressure >4.2 MPa
- Max operating temperature: 70°C
- Size: 56 litres
- Port size: DN32 to DN50 (Sizes out of this range will not be accepted)
- Gas port: Standard
- Connection to accumulator: standard adapter

- Material:
 - Fluid port- Stainless steel
 - Shell- Stainless steel
 - Bladder- phosphate ester resistant (e.g. Butyl)

The accumulators have been classified as Category IV according to SANS 347.

3.13.2 Safety blocks

The safety blocks supplied by the *Contractor* shall conform to the following specifications:

- Design: Basic safety valve with manual operated pressure release valve
- Fluid: Phosphate ester
- Max operating pressure: Higher than the max operating pressure of the accumulator
- Max operating temperature: 70°C
- Size: Main shut-off valve DN32 (minimum)
- Connection to pipe: Union coupling or Banjo fitting
- Connection to accumulator: standard adapter
- Material:
 - Block- Stainless steel
 - Seals- phosphate ester resistant (e.g. EPDM)
- Accessories: Lockable main shut-off valve

3.13.3 Piping

- The *Contractor* shall install the piping as per the “as required” pipe isometric drawings provided.
- The new nozzles/stubs shall be stainless steel bar as per section 3.5 above and shall be welded according to a qualified PQR and WPS. The QPR and WPS shall be approved by an Eskom welding engineer before work commences.
- The weld shall be a fillet weld of the appropriate size (leg length and throat thickness). The fillet weld and prep angle should be such that when the ID is drilled that it is a full penetration weld and that the root is removed. (See Figure 1 for illustrative purposes only)
- 100% surface tests to be done on all welds.

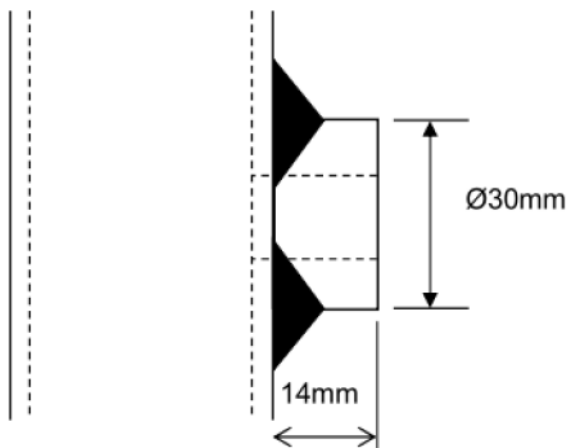


Figure 1: Side view of stub

Supply line to accumulator

- The accumulator shall be connected to the turbine control fluid delivery piping SC11 (NB125) downstream of the T-piece (NB125/50) on the horizontal pipe run upstream of the control fluid filters, refer to Appendix B for the “as required” isometric drawings.
- A permanent nozzle/stub shall be welded to the NB125 pipe to weld connect the new NB32 pipe which shall be connected to the pressure port of the safety block via a union coupling. The safety block shall be connected to the fluid port of the accumulator via a standard connection/adaptor which will be sourced from the accumulator/safety block supplier.
- The “as required” isometric drawings of the piping can be found in Appendix B, below is an example of the Unit 1 “As required” isometric drawing for the supply line highlighting the new piping to be installed.

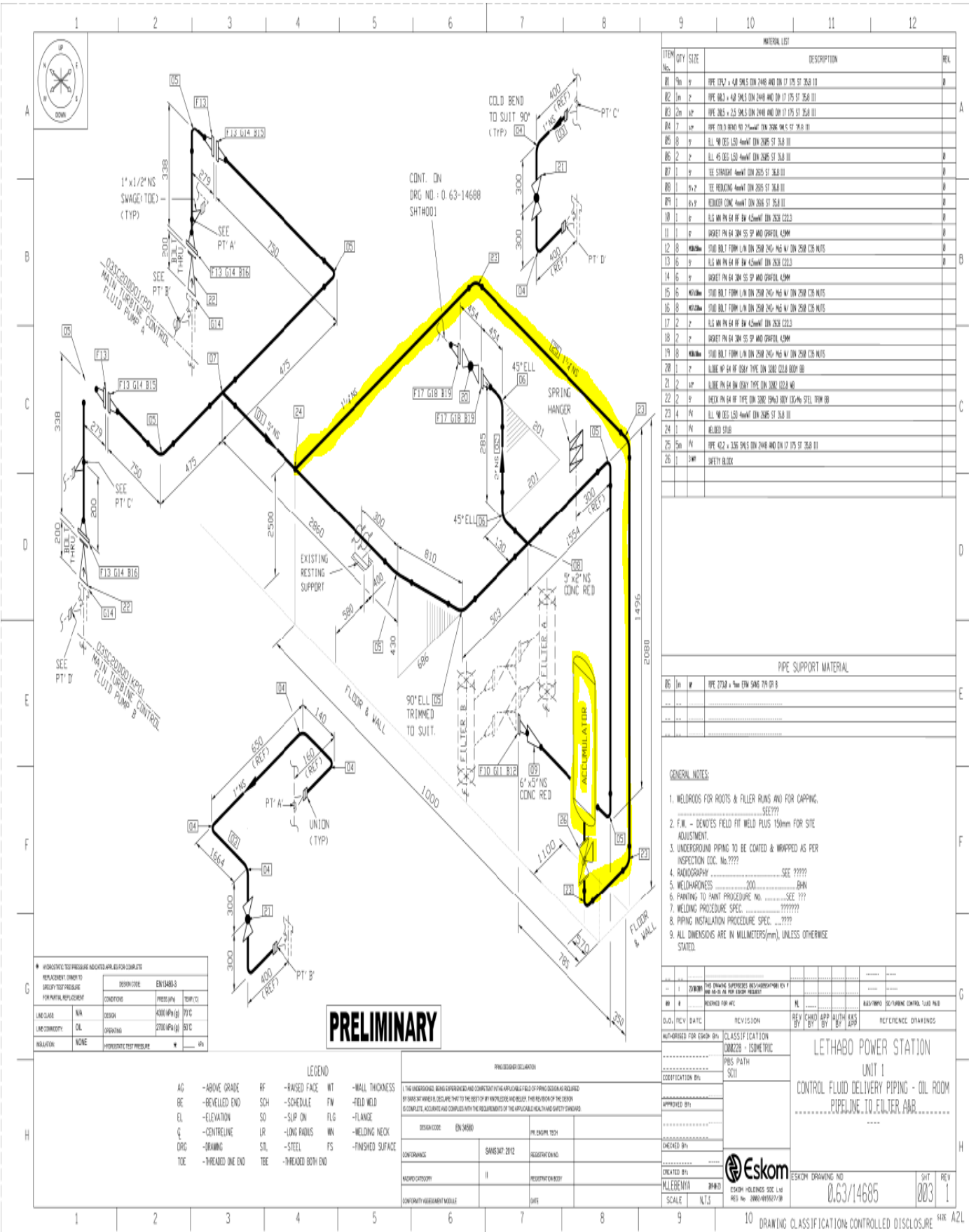


Figure 2: Unit 1 "As required" isometric drawing- supply line

Drain line to control fluid tank.

- Standard safety blocks cater for a drain port as well as at least one pressure measuring port. The drain port of the safety block shall be connected by a NB15 pipe to the bypass line SC29 (NB50) of the fluid heater, just after the bypass isolating valve (SC28S106) on the horizontal pipe run, which interconnects with the main oil return line before the control fluid tank. The Contractor shall weld- in a permanent nozzle/stub on the bypass line (SC29) in order to connect the new NB15 drain line.
- The pipe can be connected to the safety block by means of a butt weld union with female thread or a banjo fitting depending on the drain port size of the safety block.
- The updated isometric drawings of the piping can be found in Appendix B, below is an example of the Unit 1 “As required” isometric drawing for the drain/relief line highlighting the new piping to be installed.

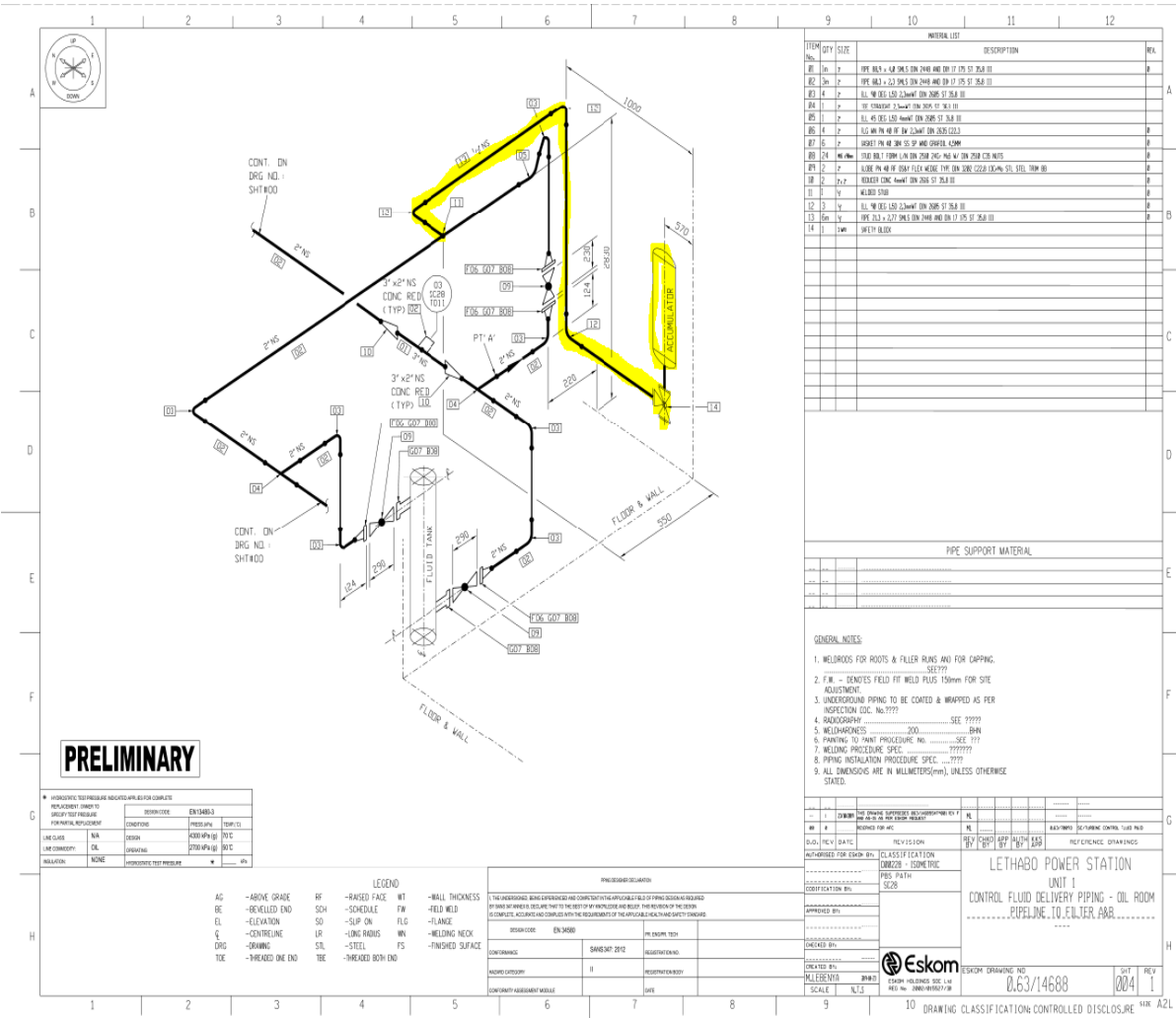


Figure 3: Unit 1 “As required” isometric drawing- drain line.

3.13.4 Bracketing

- The accumulator shall be mounted to the wall which shall limit long pipe runs as well as prevent pipe work from interfering with maintenance activities on surrounding equipment, refer to Figure 4 and Appendix B.

- The accumulator shall be mounted by using standard mounting components which can be sourced from the accumulator supplier itself. Typically consist of a base bracket for support as well as clamps to restrain the accumulator in the vertical position but might differ from supplier to supplier.
- These components are secured to the wall by means of rawl /expansion bolts. The sizes of bolts shall be dictated by the size of bracket used.
- The *Contractor* shall scan the concrete wall, to confirm the position of the reinforcement prior to installing the steel frame/bracket. This will ensure that the steel reinforcement is not damaged during the installation.



Figure 4: Location of accumulator

Management and start up.

Management meetings

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	As and when required	Project boardroom	<i>Employer, Contractor, Supervisor</i>
Overall contract progress and feedback	Biweekly on Mondays	Project boardroom	<i>Employer, Contractor, Supervisor,</i>
Toolbox sessions	Every-day before commencing of work	Site	All the <i>Contractor's</i> employees.
Overall contract progress and feedback	Biweekly time to be agreed upon contract award	Projects Boardroom	<i>Employer's</i> and <i>Contractor's</i> Representatives
Kick off meeting	Once after contract award	Projects Boardroom	<i>Employer's</i> and <i>Contractor's</i> Representatives

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

All meetings are recorded using minutes and attendance registers prepared and circulated by the person who convened the meeting.

During the weekly meetings, the *Contractor* reports the overall progress and the following as a minimum requirement:

- *Contractor's* current activity progress and planned finish dated
- *Contractor's* planned start and finish dates for the works
- Discussion on the *Contractor's* programme
- Health, safety and quality issues
- The progress of any other relevant activities
- Discussion on any technical and commercial issues
- Problem areas or concerns

Health and safety risk management

The *Contractor* shall comply with the health and safety requirements indicated below;

SHE File will be compiled and presented to Eskom - Lethabo Power Station (Safety Department) by the successful bidder (*Contractor*) for approval prior to the commencement of the job.

Firm safety plans that shall be verified by Client SHE Functionary and approved by the Client Project Custodian must be in place and shall be implemented during project execution.

Task risk assessments will be done and followed by the *Contractor*. Over and above that, the Employer will conduct random spot audits such as SMAT.

PPE and Vehicle inspections to be conducted on daily basis.

The *Contractor* shall be familiarised with Eskom's Health & safety policy.

The *Contractor* shall be expected to have OHS system that is aligned to the client's

The Contractor shall be expected to conduct task risk assessment and pre-job briefs before performing work

The *Contractor* shall be expected to conduct task risk assessment and pre-job briefs before performing work.

Compliance to the SHE requirements for the Eskom commercial process

Employer's project manager to also ensure that all required permits are issued to the contractor's authorised supervisor on daily basis. (Both the contractor and Eskom)

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

Environmental constraints and management

The *Contractor* ensures that all goods, services or *works* supplied in terms of the Contract comply with all applicable environmental legislations. The *Contractor* is responsible for keeping the work area clean of any environmental waste.

All environmental incidents must be reported to the *Employer* within 24 hours of such occurrences. All environmental incidents occurring on the Project Site and/or on the *Employer's* property must be recorded detailing how each incident was dealt with in an Environmental Incident register.

ISO14001, Lethabo environmental procedures will be provided with tender documents

No EIA needed, however, to ensure compliance to environmental requirements, ISO14001, Lethabo environmental procedures will be provided with tender documents

- *Contractor* to be familiarized with Lethabo Environmental statement of commitment (PS010)
- SHE File to be approved by the Environmental department
- *Contractor* to be ISO14001:2015 compliant

- Upon commencement of work contractor shall submit:
- An Aspect and Impact Register that complies with the ISO 14001:2015 standard.
- *Contractor* shall submit an Environmental Management Plan (EMP) associated with environmental risks related to the project, EMP shall comply with the ISO 14001 standard.
- *Contractor* shall familiarise him/herself with the Environmental procedures related to the activity
- Self-audits during work execution will be conducted weekly whereby environmental risks are identified.
- Environmental awareness to be conducted through toolbox talks
- All waste generated during execution of work, must be disposed through proper pathways
- *Contractor* shall report all incidents or risks whilst on the job to the Eskom Project leader who will inform the environmental department.
- *Contractor* shall comply to the following environmental procedures:
 - LBE23003 Environmental non-conformance; investigation and reporting
 - LBE22005 Environmental spill management procedure
 - LBE22004 Environmental waste management procedure

The *Contractor* shall comply with the Environmental requirements contained in Annexure 1.13 to this Works Information.

Quality assurance requirements

Quality Management Plan to be submitted and adhered to. Not complying will result in NCR processes being followed.

Equipment quality measure and the equipment condition must be Quality Controlled and verified before use.

To ensure conformance to Quality Management Systems Standards such as:

- ISO 9001:2015 Quality Management System requirements.
- ISO10005 – Quality Management System Guidelines for Quality Plans
- ISO10006 – Quality Management Systems Guidelines for Quality Management in Projects.
- ISO10007 – Quality Management Systems Guidelines for Configuration Management.
- ISO31000 – Risk Management Principles & Guideline

The *Contractor* is required to compile and submit to the *Project Manager* all QCPs and ITPs for review and acceptance. The *Contractor* submits to the *Project Manager* with a detailed contract organogram showing the quality personnel to be used in the *contract*.

The *Contractor* submits as a minimum the following documents, as required by the *Project Manager*, which requirements does not constitute a compensation event, during the execution of the works:

- Updated QCP register including the *Client's* Intervention points.
- Inspection notifications accompanied by their inspection report.
- Non-conformance and Defect registers and reports.
- Updated site inspection schedules.
- Inspection and test reports.
- Monthly contract quality progress report.

- Data books for the completed *works*.

Quality Responsibility

The *Contractor* is accountable for the quality of the output and liable for any failures. The *Contractor* is responsible for defining the level of intervention of QA/QC or inspections. Such intervention points are to be in line with the *Employer's* requirements.

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

The intervention requirements take into consideration the criticality of the *plant* and *materials*. The interventions points include all witness, hold, verification, review, and approval points required by the *Employer*. Failure by the *Contractor* to allow for such intervention points will constitute a non-conformance.

Apply Category 2 - Quality Requirements to be met

The service provider is required to conduct sufficient inspections and tests to satisfy that all requirements of the SOW met, and the results of inspections and tests are made available to the client.

The *Contractor*

provider is to ensure that all products are preserved in their appropriate manner as described in their specifications or in Eskom's Preservation, Shipping and Transportation procedures as applicable. The service provider ensures that all storage requirements for products are properly implemented to preserve the products against adverse conditions, deterioration, damage, etc. Storage and preservation procedures for the different products must be submitted to the client for review and acceptance. The client may request to inspect the stored products at any given point during the storage period of the product.

All documents and records management should be performed according to Technical Document and Record Management Work Instruction (240-76992014). The Project Manager ensures that the *Contractor* provider is provided with the latest revision

Inspections

The *Contractor* is required to conduct sufficient inspections and tests to satisfy himself that all requirements of the Works Information are being met and the results of inspections and tests shall be submitted to the *Project Manager* in accordance with the *Contractor's* Quality Management System (i.e. accepted QCP/ITP). The *Employer* only witnesses/verifies that the *works* is conducted as per the *contract*.

Where the *Contractor's* or *Employer's* inspections and/or tests reveal that the requirements of the Works Information have not been attained, the *Contractor* is required, at his expense, to rectify the work to the extent that it does conform with the Works Information.

The *Contractor* drafts a QCP or ITP which shows each activity from the Works Information and submits to the *Project Manager* for acceptance. The *Contractor* provides suitably qualified personnel to conduct onsite inspections.

The *Contractor* ensures that all *works* are inspected and approved before the *Employer* is invited for witnessing/verification.

The *Contractor* provides a minimum of 2 working days' notice when inviting the *Employer* to verify/inspect the *works*. The notice to the *Employer* is to contain as a minimum the type of inspection to be conducted, structure/component to be inspected and all relevant QC report and/or documents to be filled/completed.

Damages as a result of the *Contract's* failure to comply with the inspection notice period as specified in the above paragraph will be borne by the *Contractor* and no compensation events will arise out of this.

Non-Conformance and Defects

Where NCR's and defects notifications are issued, the *Contractor* acknowledges receipt within 48 hours and proposes corrective and preventive actions to the *Project Manager* as per the *contract* response period. The corrective and preventive actions will include the implementation and completion dates. Progress on all NCR's and defect notifications issued to the *Contractor* must be report the *Project Manager* on a weekly basis.

The *Contractor's* quality manager keeps a register of all NCR's and defect notifications issued. Deviations from the *contract* are treated as a non-conformance. Records of NCRs and Defect Notifications are kept and form part of the data book records.

Quality Reporting

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

- A register of NCRs and defects
- Updated QCP/ITP register
- QA monthly report summary
- Planned and completed local inspection dates
- Completed and outstanding inspections
- Principal material orders and stocks on site
- *Contractor's* equipment, plant and temporary works on the site or due to be delivered to or removed from the site.

Contractor's management, supervision and key people

The *Contractor* provides a detailed organogram to the Project Manager that clearly indicates the employee's details. In the event of any person within the *Contractor's* organogram changing, the *Contractor* is to obtain acceptance for the replacement from the Project Manager.

The *Contractor* shall provide his own Authorised Supervisor(s) as required by the Permit to Work system on site during the execution of works.

Invoicing and payment

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

(1) The *Contractor* shall address the tax invoice to:

Lethabo accounts payable section (APS).

Private Bag x 415

Vereeniging

1930

E-mail their pdf format to Invoiceseskomlocal@eskom.co.za

and include on each invoice the following information:

- (2.1) Name and address of the *Contractor*.
- (2.2) The contract number and title;
- (2.3) *Contractor's* VAT registration number;

- (2.4) The *Employer's* VAT registration number 4740101508;
- (2.5) The total Price for Work Done to Date which the *Contractor* has completed;
- (2.6) Other amounts to be paid to the *Contractor*;
- (2.7) Less amounts to be paid by or retained from the *Contractor*;
- (2.8) The change in the amount due since the previous payment being the invoiced amount - excluding VAT, the VAT and including VAT;

The original invoice together with the *Project Manager's* payment certificate shall be emailed to Invoiceseskomlocal@eskom.co.za

Insurance provided by the *Employer*

- (1) Refer to Part C1.

Contract change management

The change management process for addressing changes on the contract will be as follows;

- All requests for contract changes shall be submitted in writing by the *Contractor* to the *Project Manager* as per the terms and condition of the contract.
- The *Project Manager* will follow the prescribed requirements for managing contract changes as per his/her delegation of authority.
- The *Contractor* shall ensure that all changes accepted by the *Project Manager* are documented and kept as record.

Provision of bonds and guarantees

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

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

Training workshops and technology transfer

Contractor shall provide training to Operating personnel, Security personnel and to Engineering on the software.

Procurement

There is a cross reference from the definition of Disallowed Cost in Options C D and E to the Works Information regarding procurement procedures. This part of the Works Information MUST include any such procedures to be able to administer this procedure. Options A & B may also require constraints on procurement procedures.

People

Minimum requirements of people employed on the Site

- (1) It is the *Contractor's* sole responsibility to ensure all its employees have permits to perform work in the Republic of South Africa.

BBBEE and preferencing scheme

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

Section 1: Specific Goals

A maximum of 10/20 points may be awarded to a tenderer for the specific goal specified for the tender. The points scored for the specific goal must be added to the points scored for price and the total must be rounded off to the nearest two decimal places. Subject to section 2(1)(f) of the Preferential Procurement Policy Framework Act, the contract must be awarded to the tenderer scoring the highest points.

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

NB: The following documents are required to claim preference points,

- Valid B-BBEE certificate issued by a SANAS accredited verification agency / sworn affidavit / CIPS affidavit.
- Proof of ownership / shareholding (preferably CIPC documentation) inclusive of shareholding breakdown
- Certified ID copies of shareholder(s)

- Proof of Disability (where applicable)
- In a case of a trust, consortium or joint venture (including incorporated consortia and joint ventures) a consolidated B-BBEE status level verification certificate.

Tenderer failing to provide documentation for the allocation of preference points will not be disqualified, but'

- May only score point out of 80 for price
- Scores 0 points out of 20 for specific goals

Section 2: Objective criteria

The inclusion of objective criteria is not mandatory but a condition for contract award. If the tenderer does not meet objective criteria; it may lead to the second-ranked tenderer being recommended for award.

2.1 Designated Sectors

When applicable the following stipulated minimum threshold for Local Production and Content must be achieved in full by the tenderer

a) Is this Commodity or part of it a Designated Sector?

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please indicate below Designated Components

Commodity	Components	Local Content Threshold
Fasteners	Bolts, nuts, rivets and nails	100%
Plates	>4.5mm	100%
Rubber	Rubber	100%
Joining/connecting components	Gussets, cleats, stiffeners, splices, cranks, kinks, doglegs, spacers, tabs, brackets	100%

NOTE 1: Tender Returnable:

- The Declaration Certificate for Local Production and Content (SBD 6.2)
- Annexure C (Local Content Declaration: Summary Schedule)
- Annexure D (Imported Content Declaration – supporting Schedule to Annexure C)
- Annexure E (Local content Declaration – supporting Schedule to Annexure C)

NOTE 2: Application for exemptions:

If the required input materials cannot be wholly sourced from South Africa, bidders should request and obtain a written exemption letter from the DTIC. The exemption letter should then be submitted, and approvals obtained prior to the closure of the bid(s). The DTIC together with the procuring organ of state and the winning bidder will consider the exemption on a case-by-case basis.

The above MUST be completed, duly signed, and submitted by the bidder..

2.2 CIDB Skills Development

Continuation of Mandatory Requirements

a) Is there CIDB compulsory training?

If Yes, what is the % of the Construction Skills Development Goal % (CSDG)

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

If the answer above is Yes, it will then be mandatory for the supplier to match Eskom's targets

Criteria	Eskom Target	Tenderer Commitment
CSDG Percentage	N/A	
Description	4ME	

NOTE: Failure by the Contractor/Service Provider/Supplier to meet the CIDB CSDG mandatory % will render their tender non-responsive.

Section 3: SDL&I Objectives in line with Reconstruction and Development Programme (RDP) Goals

Tenderers who complete and submit the objectives as required, but who do not meet Eskom's targets, will not be disqualified. SDL&I objectives do not form part of scoring but commitments will form part of contractual obligations

Note: The undertakings shall be sourced from previously disadvantaged Communities around Sedibeng and Fezile Dabi District Municipalities.

3.1. Transformation – BBBEE Improvement or Retention Plan

Transformation remains an area of focus, where Eskom continuously strives to align itself with national transformation imperatives to unlock growth, drive industrialization, create employment and contribute to skills development. Eskom encourages its suppliers to constantly strive to improve their B-BBEE rating. Whereas Tenderer/s will be allocated points in terms of a preference point system based on specific goals, Eskom also requests that tenderer/s submits their B-BBEE improvement or retention plan within 30 days of signing the contract.

Tenderer/s are therefore requested to indicate the extent to which they will maintain (only if the respondent is a Level 1) or may improve/maintain their B-BBEE status over the contract period if their B-BBEE status is level 2 or 3. Tenderer/s with a B-BBEE status level 4 at the time of contract award, shall migrate and achieve as a non-negotiable a milestone of B-BBEE Level 3 by the end of the first year of the contract and thereafter improve their B-BBEE status level or migrate by one level higher. Tenderer/s with a B-BBEE recognition status of Level 5 to Level 8 or non-compliant at the time of contract

award, shall migrate and achieve as a non-negotiable a milestone of Level 4 by the end of the first year of the contract and thereafter improve at least one B-BBEE Level higher of each year from the second year of the contract. Tenderer/s are requested to submit their B-BBEE Improvement Plan as an essential document within 30 days of signing the contract.

NB: A valid B-BBEE certificate or Sworn Affidavit is a condition for contract award, if your company's annual Total Revenue is R10 Million or less you qualify as an Exempted Micro Enterprise therefore you can submit Sworn Affidavit. If your annual Total Revenue is R50 Million or less, you qualify as Qualifying Small Enterprise and must comply with all of the elements of QSE score card relevant to your sector unless an entity is at least 51% Black owned you are required to obtain a Sworn affidavit. If your Annual Total Revenue is above R50m you need to submit a Valid B-BBEE certificate.

3.2. Local Procurement Content

"Local Procurement Content" refers to value added in South Africa by South African resources. Where a single contract involves a combination of local and imported goods and/or services, the tender response must be separated into its components as per the Price Schedule included with the tender documents. Local procurement content is total spending minus the imported component.

Tenderers are required to submit their proposals in the table below.

Local Procurement Content	Eskom target	Tenderer Proposal
	100%	

3.3. Procurement spend on entities with a minimum 51% black ownership

The tenderer will subcontract some of the SOW to the designated suppliers i.e., EME / QSE with at least 51% BO. The designated suppliers should not be part of their subsidiaries or having shares in that company, preferable they should be selected from local to site and shall be as follows:

Procurement Designated Group	from	Eskom Target	Tenderer Proposal
Black Owned		15%	

Potential scope

- Installation
- PPE Supplier and printing.
- Site establishment (i.e. employee transportation)
- Plant hire (Folk lifts, Crane, Rigging equipment)

- Components transportation
- Medicals

The following are tender returnable.

- Proof of a sub-contract agreement/s
OR
- Letter of intent

3.4. Jobs. Tenderers are required to submit proposals for the type and number of jobs that will be created and retained in South Africa as a direct result of being awarded a contract.

Type of Jobs to be created	Number of Jobs to be created

Type of Jobs to be retained	Number of Jobs to be retained

Local pool criteria:

Type of jobs	Target set (local-to-site)	Suppliers Proposal
General workers	100%	
Semi-skilled	70%	
Skilled	30%	

Section 4: SDL&I Penalty and Performance Security

Eskom will apply a penalty of 2.5% of the invoice amount for failure to meet SDL&I obligations.

For the duration of the contract, Eskom will retain 2.5% of every invoice (excluding VAT) as security for the fulfilment of all SDL&I Obligations. The retained amounts shall only be released to the Contractor upon:

- Eskom receives the SDL&I progress report/s from the contractor.
- Fulfilment of all SDL&I obligations by the contractor.
- Submission of an approved compliance report by SDL&I Department.

Section 5 General Information on Validity of Sworn Affidavits

The following must be considered when it comes to validity of Affidavits;

Tenderers submitting B-BBEE Sworn Affidavits must ensure that the affidavits meet the following key pointers to ensure their validity:

Name/s of deponent as they appear in the identity document and the identity number.

Designation of the deponent as the **director**, **owner** or **member** must be indicated in order to know that person is duly authorised to depose of an affidavit. **(Mark the applicable option).**

Name of enterprise as per enterprise registration documents issued by the CIPC, where applicable, and enterprise business address.

Percentage of black ownership, black female ownership and designated group. In the case of specialised enterprises as per Statement 004, the percentage of black beneficiaries must be reflected. **(No blank spaces to be left).**

Indicate total revenue for the year under review and whether it is based on **audited financial statements** or **management account**. **(Mark the applicable option).**

Financial year end as per the **enterprise's registration documents**, which was used to determine the total revenue. **(Financial year end to be stipulated by day/month/year).**

B-BBEE Status level. An enterprise can only have one status level. **(Tick applicable level)**

Empowering supplier status must be indicated. For QSEs, the deponent must select the basis for the empowering supplier status.

Date deponent signed and date of Commissioner of Oath must be the same. **(The sworn affidavit must be signed in the presence of the Commissioner of Oath. Furthermore the Commissioner must also sign and stamp)**

Commissioner of Oath cannot be an employee or ex officio of the enterprise because, a person cannot by law, commission a sworn affidavit in which they have an interest.

Section 6: Market Research

The following information demonstrates market analysis and assisted in arriving at the targets above:

Current Suppliers Providing the Services

Open Market

Potential Suppliers

Open Market

Section 7: Reporting and Monitoring

- The suppliers shall on a quarterly basis submit a report to Eskom in accordance with Data Collection Template on their compliance with the SDL&I obligations described above.
- Eskom shall review the SDL&I reports submitted by the suppliers within 30 (thirty) days of receipt of the reports and notify the suppliers in writing if their SDL&I obligations have not been met.

- Upon notification by Eskom that the suppliers have not met their SDL&I obligations, the suppliers shall be required to implement corrective measures to meet those SDL&I obligations before the commencement of the following report, failing which Retention clauses shall be invoked.
- Every contract shall be accompanied by the SDL&I Implementation Schedule, which must be completed by the suppliers and returned to SDL&I representative for acceptance 28 days after contract award. This will be used as a reference document for monitoring, measuring and reporting on the supplier's progress in delivering on their stated SDL&I commitments

Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

N/A

Subcontracting

Preferred subcontractors

- The Contractor will be required to provide the Employer with all information regarding his Subcontractors. The Employer will need to accept all Subcontractors to be used by the Contractor.
- The *Contractor* shall be responsible for all the activities performed by the Subcontractors

Subcontract documentation, and assessment of subcontract tenders

- The *Contractor* shall be responsible for all documentation and work performed by Subcontractors.
- The *Contractor* shall ensure that all work performed by his Subcontractor is in accordance to the *Employer's* Works Information and meet all quality requirements.
- The *Project Manager* may make use of his quality control officers to conduct audits on work performed by the Subcontractor.

Limitations on subcontracting

The *Contractor* may not subcontract 100% of the scope of work.

Attendance on subcontractors

N/A

Plant and Materials

Quality

Quality is usually designed in or specified in the technical specifications referred to in section 6 of this Works Information. However to cover circumstances where quality may not be prescribed, this sub-paragraph could be used as an overarching default requirement. It could also be used to deal with how repairs are carried out after a Defect has been notified; for example can the item be fixed up or must it be replaced by a new one. See also SANS 1200A, sub-paragraph 3.1

Plant & Materials provided “free issue” by the *Employer*

- (1) All Plant and Materials are to be provided by the *Contractor*.

Contractor's procurement of Plant and Materials

Specify any constraints on how the *Contractor* is to order, codify, expedite, freight, import, transport to Site and any other requirements for delivery and storage before installation. The *Employer* may require warranties from suppliers to be in favour of the *Employer* and not just to the *Contractor* during the life of the contract. Also include requirements for vendor data which the *Employer* may need after Completion of the whole of the *works*. THIS IS A VERY IMPORTANT SECTION IN PROCESS PLANT AND UTILITY PROCUREMENT CONTRACTS.

Spares and consumables

N/A

Tests and inspections before delivery

N/A

Marking Plant and Materials outside the Working Areas

All equipment to be installed will be labelled with the equipment name and IP address.

Cataloguing requirements by the *Contractor*

The employer will assign plant codes and update the system.

Temporary works, Site services & construction constraints

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

Normal working hours are 07:15 to 16:30 Mon-Thursday and 07:15 to 12:15
On Friday

Commissioning

- (1) Commissioning is defined as bringing into service all items and meeting the functional requirements and performance criteria for the Works.
- (2) The *Contractor* is responsible for co-ordinating and executing commissioning (including that of Subcontractors) activities in conjunction with the various departments of the *Employer* namely Operations, Engineering, Commissioning and QA/QC.
- (3) Commissioning includes testing and verification of the stated performance criteria with:
 - (3.1) Minimum Testing and Assessment criteria (as set-out in previous sections of this Works Information document as well as supplementary requirements which will be discussed with the detailed QA/QC plan).
 - (3.2) Commissioning of the Works will commence after the plant safety clearance (which includes all turnover packages from construction to commissioning and including submissions such as the *Contractor's* Completion Certificate to the *Employer*).
- (4) The *Contractor* submits a recommended Commissioning and Testing Program to the *Employer* for Consideration and acceptance. The accepted schedule forms the basis of the commissioning and testing program that is implemented during the overall cameras commissioning and testing program.

- (5) Any commissioning and testing activity is confirmed on the project schedule with the *Employer* and if necessary, rescheduled (and where requested, in writing) by the *Contractor* in the appropriate forum provided 48 hours in advance to allow for the release of the works.
- (6) The *Contractor* interfaces directly with the station's commissioning staff and other involved Contractors and is available on a 24-hour basis on site if required for specific activities until this phase is completed.
- (7) The *Contractor* prepares and submits the Commissioning and Testing Procedures two months before the installation phase commences, for approval to the *Employer*, the Commissioning and Testing Procedures for all the commissioning and testing activities to be performed, detailing the methods, functionality checks, and acceptance criteria that are applicable.
- (8) Visually inspect the Works and components to verify the placing of plant labels, for their correctness and completion as per the requirements as set out in the technical evaluation, it should also be on the ITP/QCP and data book documentation.
- (9) The *Contractor* will provide sufficient skilled personnel for the satisfactory and timely commissioning of equipment; including the re-commissioning of existing equipment that will form part of the Works. The *Contractor* also provides all the test equipment for commissioning of the Works.
- (10) The *Contractor* must certify, in writing and in an official format (Certificate of Manufacture), to the *Employer* that equipment is in a suitable and safe condition for use before it is placed in service. The *Contractor* submits to the *Employer* on the ITP/QCP and documented in the data book for approval and endorsement of the following documents:
 - (10.1) All commissioning check sheets and tests
 - (10.2) Operational Acceptance Test reports

Start-up procedures required to put the *works* into operation

- (1) Works shall be put into operation once completion has been achieved. This shall be monitored in conjunction with signed off quality plans.
- (2) Where necessary the *Contractor* shall arrange with the *Project Manager* or Supervisor to test the plant installed.

Take over procedures

- (1) The *Employer* will take over the plant after he is satisfied with the optimisation.
- (2) The *Contractor* will need to be on standby for the first 14 days after hand over and must provide further telecommunication assistance for the whole testing duration.
- (3) The *Contractor* must be available on site within 24 hours to provide technical assistance if required during the testing period of 3 months.

Access given by the *Employer* for correction of Defects

- (1) After the works have been put into operation, defects process as per NEC will be followed.

Operational maintenance after Completion

N/A

List of drawings

Drawings issued by the *Employer*

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

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Revision	Title

C3.2 *CONTRACTOR'S* WORKS INFORMATION

This section of the Works Information will always be contract specific depending on the nature of the *works*. It is most likely to be required for design and construct contracts where the tendering contractor will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical sub headings could be

- a) *Contractor's* design
- b) Plant and Materials specifications and schedules
- c) Other

This section could also be compiled as a separate file.

PART 4: SITE INFORMATION

Document reference	Title	No of pages
C4.1	This cover page	1
	Site Information	8
Total number of pages		9

C4 Site Information

Core clause 11.2(16) states

“Site Information is information which

- describes the Site and its surroundings and
- is in the documents which the Contract Data states it is in.”

In Contract Data, reference has been made to this Part 4 of the contract for the location of Site Information

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

1. Site Procedures and Regulations

1.1 Health and Safety Requirements

The *Contractor* and his subcontractor's always ensure compliance with safety regulations imposed by any Act of Parliament, ordinance or any regulation or by-law of any local or statutory authority.

- The *Contractor* acts in accordance with the health and safety requirements stated in the *Works Information*.
- In carrying out its obligations to the *Employer* in terms of this contract; in Providing the *Works*; in using Plant, Materials and Equipment; and while at the Site for any reason, the *Contractor* complies and procures and ensures the compliance by its employees, agents, Sub-*Contractor*'s and mandataries with:
- the provisions of the Occupational Health and Safety Act 85 of 1993 (as amended) and all regulations in force from time to time in terms of that Act (“the OHSA”); and the Eskom “Health, Safety and Environmental specifications for *Contractor*'s” document attached to the *Works Information* (as amended from time to time) and such other Eskom Safety Regulations as are applicable to the *works* and are provided in writing to the *Contractor* (collectively “the Eskom Regulations”). The Eskom Regulations may be amended from time to time by the *Employer* and all amendments will be provided in writing to the *Contractor*. The *Contractor* complies with the provisions of the latest written version of the Eskom Regulations with which it has been provided and the health and safety plan prepared by the *Contractor* in accordance with the SHEQ Requirements (The OHSA and the Eskom Regulations are collectively referred to as the “SHEQ Requirements”).
- The *Contractor*, at all times, considers itself to be the “*Employer*” for the purposes of the OHSA and shall not consider itself under the supervision or management of the *Employer* with regard to compliance with the SHEQ Requirements, the *Contractor* shall furthermore not consider itself to be a subordinate or under the supervision of the *Employer* in respect of these matters. The *Contractor* is at all times responsible for the supervision of its employees, agents, Sub-*Contractor*'s and mandataries and takes full responsibility and accountability for ensuring they are competent, aware of the SHEQ Requirements and execute the *works* in accordance with the SHEQ Requirements
- The *Contractor* acknowledges that it is fully aware of the requirements of all the above and undertakes to employ only people who have been duly authorized in terms thereof and who have received sufficient training to ensure that they can comply therewith.
- The *Contractor* ensures that all statutory appointments and appointments required by any Eskom Regulations are made and that all appointees fully understand their responsibilities and are trained and competent to execute their duties. The *Contractor* supervises the execution of their duties by all such appointees.
- The *Contractor* shall appoint a person who will liaise with the Eskom Safety Officer responsible for the premises relevant to this contract. The person so appointed shall, on request: supply the Eskom Safety Officer with copies of minutes of all Health And Safety Committee meetings, whenever he is

required to do so; supply the Eskom Safety Officer with copies of all appointments in respect of employees employed on this contract, in terms of the Act and Regulations and shall advise the Eskom Safety Officer of any changes thereto.

The *Employer*, or any person appointed by the *Employer*, may, at any stage during the duration of this contract:

- conduct health and safety audits regarding all aspects of compliance with the SHEQ Requirements, at any off-site place of work, or the site establishment of the *Contractor* refuse any employee, Sub *Contractor* or agent of the *Contractor* access to the premises if such person has been found to commit an unsafe act or any unsafe working practice or is found not to be qualified or authorised in terms of the SHEQ Requirements;
 - issue the *Contractor* with a stop order should the *Employer* become aware of any unsafe working procedure or condition or any non-compliance with any provision of the SHEQ Requirements.
 - The *Contractor* immediately reports any disabling injury as well as any threat to health or safety of which it becomes aware at the *works* or on the Site to the *Employer*.
- The *Contractor* undertakes not to do, or not to allow anything to be done which will contravene any of the provisions of the Act, Regulations or Safety and Operating Procedures.
 - The *Contractor* appoints a person, qualified in accordance with the SHEQ Requirements, as the liaison with the Eskom Safety Officer for all matters related to health and safety, this person shall be reachable 24 hours a day.
 - The *Contractor* confirms that it has been provided with sufficient written information regarding the health and safety arrangements and procedures applicable to the *works* to ensure compliance by it and all employees, agents, Sub-*Contractor's* or mandataries with the SHEQ Requirements while Providing the *Works* in terms of this contract. As such, the *Contractor* confirms that this contract and the relevant Eskom Regulations referred to in this contract constitute written arrangements and procedures between the *Contractor* and the *Employer* regarding health and safety for the purposes of section 37(2) of the OHSA.
 - The *Contractor* agrees that the *Employer* is relieved of any and all of its responsibilities and liabilities in terms of Section 37(1) of OHSA in respect of any acts or omissions of the *Contractor*, and the *Contractor's* employees, agents or Sub-*Contractor's*, to the extent permitted by the OHSA.
 - 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 expense 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, Sub-*Contractor's* and/or mandataries to comply with their obligations in terms of clause 16, and/or the failure of the *Employer* to procure the compliance by the *Contractor*, its employees, agents, Sub *Contractor's* and/or mandataries with their responsibilities and/or obligations in terms of or arising from the OHSA.
- In carrying out his obligation as the mandatory to the *Employer* for this contract in terms of the National Environmental Management Act No.107 of 1998, the *Contractor* ensures that he complies with the Act when Providing the Services or using plant, materials or equipment.

1.2 Permit to Work System

- NO work shall be carried out without a "PERMIT TO WORK"
- The *Contractor's* Responsible Person(s) must satisfy himself that all sources of possible danger are isolated. Details of the Permit to Work system can be found in the Plant Safety Regulations for Lethabo Power Station, Eskom OPR 3305. The *Contractor* must also make provision for his Authorise Supervisor(s) that is trained according to the procedure mentioned above.
- A Master Permit to Work is used on declared major outages, details can be found in local procedure LBA 00085. Permit changes are made during the dead time, if it is required by the *Contractor* that a certain supply be made available or plant tested than this can be applied for at the Outage Management Meeting at least 1 day in advance.
- Plant with a prohibitive sign attached may only be operated by appointed Eskom personnel. Any *Contractor* employee found tampering with such plant will be permanently removed from Site.

1.3 Safety Induction Course

- All the employees of the *Contractor* must attend a safety induction course before they will be allowed to work on the Site. It is the responsibility of the *Contractor* to ensure that all employees have attended the safety induction.
- A list of employees requiring safety induction must be submitted at least 2 days in advance of arrival on site with the date and time of arrival so that the safety induction can be arranged.

1.4 IBI Awareness Techniques

- "To prevent incidents and ensure continuous improvement of Lethabo Power Stations business performance in all areas affecting safety, reliability and production, it is expected of all **CONTRACTOR'S** service personnel, to attend a three(3) hour training session on Integrated Business Improvement Awareness, which has to be done as soon as work has commenced; This is to ensure familiarisation and use of error-prevention tools/techniques inclusive of, Pre and Post-job briefs, Risk Assessments, Self-checks(STAR principle), Job observations, Effective communications e.g.3-way, Questioning attitude, Procedural adherence, Hand overs and other related topics.
- A monthly IBI scorecard to be completed indicating the use of error prevention tools/ techniques; The assigned employee fulfilling the role of IBI representative has to attend the IBI representative's forum fortnightly, on Tuesdays, duration of one hour.
- An IBI representative appointed by the *Contractor/Supplier/Consultant* to attend the IBI Representative Forum for One (1) hour every Tuesday (fourth night).
- IBI Awareness training will be provided by Lethabo Power Station personnel, free of charge, course bookings can be arranged by contacting Rabie Heymans on extension 5094".

1.5 Transportation of passengers: open LDVs:

No *Eskom employee* or *Contractor* would be allowed to transport passengers on the back of open light delivery vehicles (LDVs).

It is a legal requirement to provide safe transportation of *Eskom* and *Contractor* employees – therefore the following will be enforced:

- All passengers must be transported in a closed vehicle with proper and adequate seating, fitted with safety belts for the number of passengers to be transported. NO passengers may be transported on the back of a light delivery vehicle (LDV) whether open or closed.
- Tools and equipment must be properly secured.
- Only authorised drivers may transport passengers.
- Proof must be submitted on request in terms of valid roadworthiness of the vehicle/s.
- The above must apply to on-site and off-site transportation of passengers.

1.6 Eskom Life-Saving Rules:

Five Life-saving Rules have been developed that will apply to all Eskom employees, agents, consultants and *Contractor's*.

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

1.7 Local Safety Procedures

- The *Contractor* adheres to all local procedures. A list of local procedures is available on request from the *Employer*.

1.8 Incidents / Accidents

- Incidents and accidents must be reported and investigated as detailed in LBA 00030. All incidents must also be reported to the *Employer* within 24 hours.
- First aid must be made available either by the *Contractor* or use can be made of the Lethabo medical centre at a fee. The availability of the *Contractor's* own first aid does not relieve the *Contractor* of his obligation to report and investigate the incident in accordance with Lethabo Procedure.

1.9 Fire Prevention

- Fire prevention and protection requirements to which *Contractor's* must comply are detailed in LBA 00030.

1.10 Protective Equipment and Clothing

- The *Contractor* supplies his own personal protective equipment necessary to carry out the *works* and the *Contractor* shall ensure that all overalls for his staff have clearly identifying **company LOGO's**
- The *Contractor* is also responsible to inspect and maintain such equipment as required in terms of the OHS Act and local procedures.

1.11 Inspection of Equipment

- The *Contractor's* equipment is inspected by an authorised Eskom employee on arrival at the site.
- The following documentation is required to accompany the equipment where applicable: copies of all test certificates and maintenance records.
- Lifting equipment and electrical equipment must be marked with a unique number, code or colour code for identification. If the equipment is found to be in an unsatisfactory condition or if insufficient maintenance has been carried out on the equipment, then it will not be approved for use on Site. A list of all lifting equipment and electrical equipment must be submitted to the *Employer* at least 2 days prior to the occupation date. This list must indicate the unique number and description of the equipment.

1.12 Documentation

The *Contractor* is responsible to have the following documentation available on-site in accordance with LBA 00030:

- A copy of the OHS Act.
- Copies of all site accident report forms as required by the OHS Act.
- Copies of minutes of health and safety meetings held on-site.
- Copies of inspection reports produced by the accident prevention officer

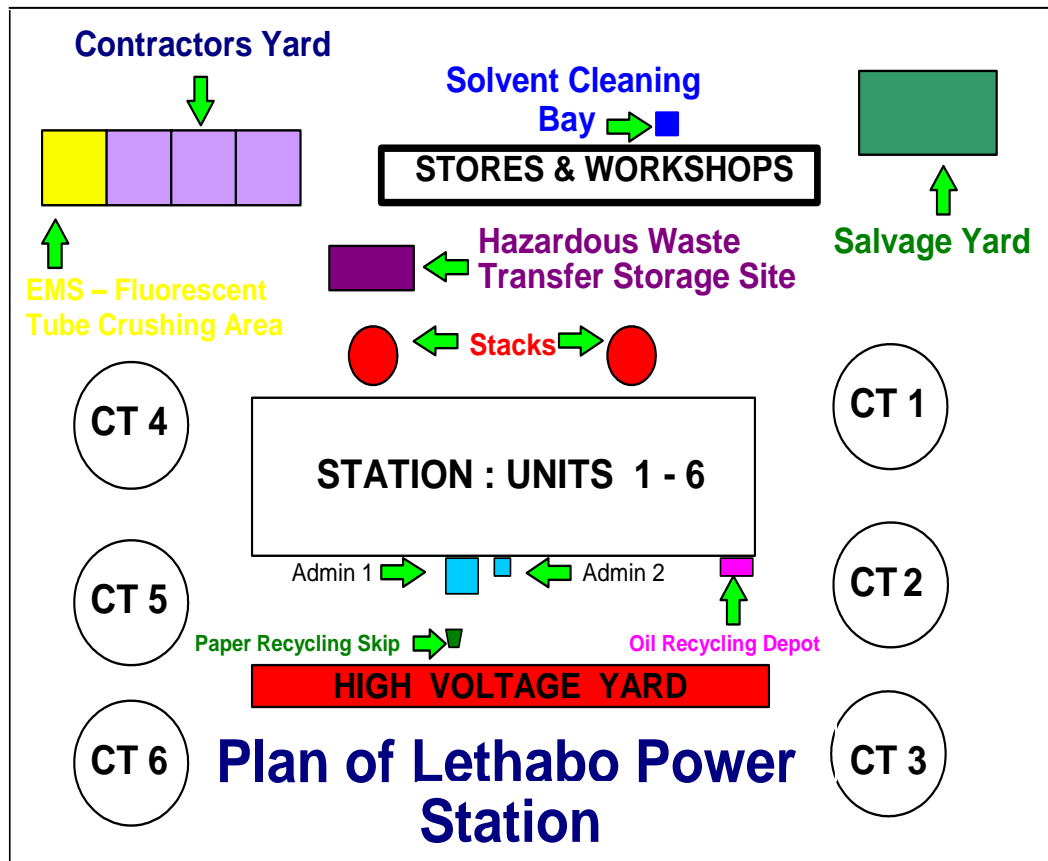
1.13 Environmental Policy and Waste Handling

Lethabo Environmental Statement of commitment must be adhered to.
The contractor shall submit to Eskom an EMP to be reviewed and approved by Eskom environmental officer, one week before the commencement of *works*.

1.14 Disposal of Waste

Waste shall be removed promptly to the designated disposal area. No stockpiling will be permitted.

- Domestic waste to the white waste bins
- Production waste in the marked bins i.e. coal and ash only
- Paper and cans to their respective recycling bins
- Contact Civil *Engineering* for the disposal of building rubble
- Scrap metal, Wood & Rubber, Redundant Valves, Pipes, and Equipment etc. to be placed in the marked bins in the new Salvage Yard. Solvents and cloths used in the Cleaning Bay.



1.15 Hazardous Waste Disposal and Handling

- Hazardous/toxic waste includes all waste which contains elements or compounds listed as hazardous substances in terms of the Hazardous Substances Act No. 15 of 1973.
- Any *Contractor* who produces hazardous waste on-site will be responsible for the safe removal of such waste to a registered Class I site by a waste removal and disposal body.
- The *Contractor* is required to produce a certificate of safe disposal in accordance with LBA 00054.
- The *Contractor* must ensure that persons handling hazardous waste have undergone suitable training and are acquainted with cleaning methods in case of a spillage.
- The *Contractor* is also responsible for the safe removal of their hazardous waste to Lethabo's Hazardous Waste Store. Other requirements for hazardous waste are detailed in LBA 00030.
- In order to ensure effective hazardous waste management, a copy of the *Contractor's* hazardous waste inventory must be supplied to the *Employer* at least 2 days prior to the occupation date.

Abbreviated list of Hazardous Materials

Acids and alkalis	Hydrocarbons	Pesticides & insecticides
Antimony and its compounds	Inorganic cyanides	Pharmaceuticals
Arsenic compounds	Inorganic compounds containing halogens	Phosphorus and its compounds
Asbestos	Inorganic compounds containing sulphur	Selenium and its compounds
Barium compounds	Laboratory chemicals	Silver compounds
Beryllium compounds	Lead compounds	Tarry & petroleum products
Biocides & phytopharmaceutics	Medical wastes	Tellurium and its compounds
Boron compounds	Mercury compounds	Thallium and its compounds
Cadmium and its compounds	Nickel and its compounds	Vanadium compounds
Chromium compounds	Organic halogen compounds	Zinc compounds
Copper compounds	Paints and paint sludges	Waste with flash point < 60°C
Heterocyclic organic compounds	Peroxides, chlorates	

1.16 Plant & Materials

- The *Employer* may at his own discretion, supply any Plant and Materials as may be required by the *Contractor* to Provide the *Works*.
- The *Contractor* is to notify the *Employer* in writing, 48 hrs in advance, of such Plant and Materials required.

1.17 Access to and Departure from the Site:

- The Site is at Lethabo Power Station situated \pm 18 km South of Vereeniging on the Viljoensdrift - Deneysville Road, Free State. Access to the site will be via the main security gate only. The *Employer* informs the *Contractor* of the access procedures, and it should be expected that such procedures may change depending on the prevailing security situation.
- The *Contractor* allows in his price and program for delays at the security gate. The *Employer* reserves the right for its Security personnel to search persons or vehicles entering or leaving the premises. This includes but is not limited to briefcases and toolboxes.

1.18 Temporary Gate Permits

- The *Contractor* provides the *Employer* with the personal details of their staff at least two days prior to the occupation date. All names and details to be submitted to the *Employer* who arranges for all gate permits.

1.19 Equipment or Material Access and Removal Access

- The *Contractor* ensures that all equipment and materials brought through the security gate is signed in at the main security gate on an OV18 form.

Removal

- The *Contractor* is not allowed to remove any equipment or materials from site without producing the relevant OV18 forms or the equipment lists.
- If the equipment or material is to be removed the same day, on which they were brought on to site, then the OV18 form will need to be produced at the gate when leaving the site.
- If the equipment or material is removed after this time then a Non-Returnable Gate Release will be provided by the *Employer*, on receipt of the original OV18, with which the *Contractor* brought the equipment on site.
- *Contractor* is to provide his own scaffolding.

1.20 Site or Area Establishment and Evacuation

Application for Site Establishment:

- Sites are allocated according to availability, the period for which the *Contractor* is going to be on-site, or if special circumstances warrant the allocation of a site. Documentation to support this application can be submitted.
- The location of the site or area is indicated during the site or area take-over inspection.

Site Establishment:

- The *Contractor* does not occupy any site or area other than that allocated to him.
- The *Contractor* does not occupy the site or area prior to the take-over inspection.
- The *Contractor* maintains the site or area provided to him to the satisfaction of the *Employer*.
- The *Employer* subjects the *Contractor's* site or area to periodic inspection.

Site Evacuation:

- The *Contractor* advises the *Employer* in writing, five (5) days in advance of evacuation in accordance with LBA 00030. Immediately prior to evacuation the necessary take-over inspection must take place.

1.21 Electrical Equipment / Appliances, Lighting and Power:

- Any electrical equipment or appliances used by the *Contractor* must comply with all relevant safety regulations and requirements as detailed in LBA 00030, and be maintained in safe and proper working condition.
- The *Employer* has the right to stop the *Contractor's* use of any electrical equipment or appliance, which in the *Employer's* opinion does not conform to the foregoing.
- The *Contractor* provides at his own expense any temporary local lighting, and ensures that it is in accordance with the requirements of the Factories Inspector.
- The *Contractor* provides at his own expense, all temporary wiring and cabling to route power from the point of supply to the various points where it is required, maintain same and remove on completion.

1.22 Water

- The *Contractor* provides at his own cost, all connection fittings, pipe-work, temporary plumbing, and pumps necessary to lead the water from the point of supply to the various points where it is required, maintain same and remove on completion.
- Such fittings must be compatible with the *Employer's* fittings so that galvanic corrosion of pipework is prevented
- Water wastage due to un-maintained pipe work or fittings provided by the *Contractor* will be calculated and will be for the cost of the *Contractor*.

1.23 Compressed Air

- The *Contractor* provides at his own cost, all connection fittings and pipe work necessary to lead the compressed air from the point of supply to the various points where it is required, maintain same and

remove on completion. Such fittings must be compatible with the *Employer's* fittings so that galvanic corrosion of pipework is prevented

- Compressed air wastage due to un-maintained pipe work or fittings provided by the *Contractor* will be calculated and will be for the cost of the *Contractor*.

1.24 Ventilation

- The *Contractor* is responsible for adequate ventilation of the *works*.

1.25 Security

- The *Contractor* is responsible for all security on *site*, fencing off, night watch and access control in order to secure all plant, materials and the *works* itself. All these measures must be in accordance with any relevant regulations and standards and subject to the *Employer's* approval.
- It is also the *Contractor's* responsibility to ensure the security of all completed portions of the *works* prior to Completion.

1.26 Offices, Workshops and Stores

- The *Contractor* shall provide, erect and maintain for his own use, any additional office accommodation and stores he requires, together with drainage, lighting, heating, and hot and cold-water services as required.
- The *Contractor's* site establishment price includes all treatment of the site that he considers necessary for his entire operation throughout his period of occupation and under all weather conditions.
- The *Contractor* also includes for all security and access arrangements that he considers necessary.

1.27 Sanitary Facilities

- The *Contractor* shall provide service, maintain and remove on completion any additional facilities required and allow for it in his *Price*.
- The *Contractor's* employees who work with asbestos are not allowed to use the *Employer's* ablution or messing facilities at the workplace during and after stripping of lagging materials, for fibres that may be attached to workers clothing, or to any other article.

1.28 Housekeeping

- Working areas are cleaned daily.
- All electrical cables and hoses are routed so as to not cross over floors and walkways.
- All equipment is packed neatly without interference to access.
- All excess scaffolding material is removed from working areas after the scaffolding has been erected.
- Scrap bins are available on the zero meter level and emptied daily by the *Employer*.

1.29 Barricading

- Access to danger zones is done using handrail type guards of at least 1,2 meters high, able to block access to the danger zone.
- Symbolic safety signs depicting "Danger" and "No entry" are attached to the guards.

1.30 Scaffolding

- All scaffolding erected complies with procedure PS/031/001.
- At least one person in the *Contractor's* service shall be competent to inspect scaffolding in the case where the *Contractor* himself needs scaffolding.
- Certificates must be handed in at the *Project Manager* after contract award.
- The *Contractor* is responsible for the supply, erection and dismantling of its scaffolding.

