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NEC3 Engineering & Construction Contract

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| **Between** | **ESKOM HOLDINGS SOC Ltd**  **(Reg No. 2002/015527/30)** | |
| **and** | **[TBA]**  **(Reg No. \_\_\_\_\_\_\_\_\_\_\_ )** | |
| **for** | **DESIGN AND CONSTRUCTION OF DRAINAGE, ACCESS AND TERRACING THE ASH DUMP WORKSHOP, SUBSTATION AND SURROUNDS AT MEDUPI POWER STATION**  Insert title of the works | |
|  |  | |
| **Contents:** |  | **No of pages** |
| **Part C1** | **Agreements & Contract Data** | **[●]** |
| **Part C2** | **Pricing Data** | **[●]** |
| **Part C3** | **Scope of Work** | **[●]** |
| **Part C4** | **Site Information** | **[●]** |
|  |  |  |
| **CONTRACT No.** | **TBA** | |
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Part C1: Agreements & Contract Data

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| **Contents:** |  | **No of pages** |
| **C1.1** | **Form of Offer and Acceptance** | **[2]** |
| **C1.2a** | **Contract Data provided by the *Employer*** | **[5]** |
| **C1.2b** | **Contract Data provided by the *Contractor***  **[to be inserted from Returnable Documents at award stage]** | **[22]** |
| **C1.3** | **Proforma Guarantees** | **[24]** |

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:

## Design and Construction of drainage, Access and Terracing at the Ash Dump Workshop, Substation and surrounding Construction at Medupi 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.

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| 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 is1 | **R** |
|  | (in words) | |

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

|  |  |
| --- | --- |
| Signature(s) |  |
| Name(s) |  |
| Capacity |  |
| **For the tenderer:** |  |
| *(Insert name and address of organisation)* | |
| Name &  signature of witness | Date |
| Tenderer’s 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.

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| --- | --- | --- |
| No. | Subject | Details |
| 1 | **[●]** | **[●]** |
| 2 | **[●]** | **[●]** |
| 3 | **[●]** | **[●]** |
| 4 | **[●]** | **[●]** |
| 5 | **[●]** | **[●]** |
| 6 | **[●]** | **[●]** |
| 7 | **[●]** | **[●]** |

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

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

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

C1.2 ECC3 Contract Data

## Part one - Data provided by the *Employer*

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| **Clause** | **Statement** | **Data** |
| 1 | **General** |  |
| The *conditions of contract* are the core clauses and the clauses for main Option | | |
|  |  | **A: Priced contract with activity schedule** |
|  | dispute resolution Option | **W1: Dispute resolution procedure** |
|  | and secondary Options |  |
|  |  | **X1: Price adjustment for inflation** |
|  |  | **X2 Changes in the law** |
|  |  | **X5: Sectional Completion** |
|  |  | **X7: Delay damages** |
|  |  | **X13: Performance Bond** |
|  |  | **X16: Retention** |
|  |  | **X17: Low performance damages**  **X18: Limitation of Liability** |
|  |  | **Z: *Additional conditions of contract*** |
|  | of the NEC3 Engineering and Construction Contract, April 2013 (ECC3) |  |
| 10.1 | The *Employer* is (Name): | **Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa** |
|  | Address | **Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg** |
| 10.1 | The *Project Manager* is: (Name) |  |
|  | Address | **Medupi Power Station Project, Steenbokpan Road**  **, Lephalale 0555** |
|  | Tel |  |
|  | Fax |  |
|  | e-mail |  |

|  |  |  |
| --- | --- | --- |
| 10.1 | The *Supervisor* is: (Name) |  |
|  | Address | **Medupi Power Station Project, Steenbokpan Road**  **, Lephalale 0555** |
|  | Tel No. |  |
|  | e-mail |  |
| 11.2(13) | The *works* are | **This scope aims to complete the outstanding work to allow for adequately function drainage and access to the Ash Dump Workshop and Substation through Design and Construction.** |
| 11.2(14) | The following matters will be included in the Risk Register |  |
|  | * **Appointing different consultants to do construction supervision** * **Scope creep which can be caused by design changes required by *Employer* and increase cost for consultant** * **Labour Strike** * **Community Unrest** * **Security of equipment, materials and resources** * **Quality and Planning Project delays due to unforeseen circumstances (e.g. inclement weather and poor quality workshop)** * **Time and Cost Delays with the Amendment of the Environment Authorities (EA) and the Water Use License (WUL) to include the South Raw Water Dam (RWD)** * **Noncompliance with Safety regulations, rules and requirements** * **COVID 19 impact on labour force and Works.** * **Non-compliance to approved Environmental Management Programme, leading to work stoppages, fines and/or prosecution.** * ***Contractor’s* poor performance during**   **project execution** |

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|  |  | * **Hazardous gas** * **Electrocution** * **Uncertain integrated schedule.** * **Non- compliance to the Permit to Work System** * **Dehydration (Hot Weather Conditions)** * **Fire and Smoke** * **Snakes** * **Normal construction hazards for Civil works** * **Dust (Soil and Ash)** * **Ground Conditions** * **Non- compliance to the *Employer’s* Life Saving Rules** * **Removal of services (Jojo tanks and Cabins)** |
| 11.2(15) | The *boundaries of the site* are | **Medupi Power Station Design and Construction of Drainage, Access and Terracing Ash Dump Workshop Substation** |
| 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 *law of the contract* is the law of | **the Republic of South Africa** |
| 13.1 | The *language of this contract* is | **English** |
| 13.3 | The *period for reply* is | **Within 7 (Seven) Calendar days with 3 days as an Emergency Period.** |
| **2** | **The *Contractor's* main responsibilities** | **Data required by this section of the core clauses is provided by the *Contractor* in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.** |
| **3** | **Time** |  |
| 11.2(3) | The *completion date* for the whole of the  *works* is | **10 Months from Appointment Date** |

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| 11.2(9) | The *key date*s and the *condition*s to be met are: | ***Condition* to be met** | | ***key date*** |
|  | **1** | **Survey including fieldwork/site visit** | **As per accepted Program** |
|  | **2**  **3** | **Geotechnical investigation and material testing**  **Review, Design Report and drawings** | **As per accepted Program**  **As per accepted Program** |
|  | **4**  **5**  **6**  **7**  **8**  **9**  **10** | **Preliminary and General, including construction monitoring, office and office run costs**  **Monitoring by Engineers**  **Shaping and terracing area between Ash Dump Workshop**  **Stormwater Concrete Drain and Earth-drain**  **Access Road and Parking area with block paving finish**  **Landscaping**  **Contract close-out documentations i.e. data books, pec reports, cc report, as-builts, operations and maintenance manuals** | **As per accepted Program**  **As per accepted Program**  **As per accepted Program**  **As per accepted Program**  **As per accepted Program**  **As per accepted Program**  **As per accepted Program**  **As per accepted Program** |

* 1. The *access dates* are: **Part of the Site Date**

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| **1** | | | **ADF Workshop Substation drainage** | **05 January 2023** |
| 31.1 | The *Contractor* is to submit a first programme for acceptance within | **Two (2) weeks of the Contract Date** | | |

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| 31.2 | The *starting date* is | **January 2023 or as soon as possible thereafter** |
| 32.2 | The *Contractor* submits revised programme at intervals no longer than | **7 (Seven) working days** |

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| **4** | **Testing and Defects** |  |
| 42.2 | The *defects date* is | **52 (Fifty-Two) weeks after Completion of the Section of the *works* as per the Accepted Programme** |
| 43.2 | The *defect correction period* is | **08 hours for emergencies or breakdowns and 4 working days for normal defects** |
| **5** | **Payment** |  |
| 50.1 | The *assessment interval* is | **between the 25th day of each successive month** |
| 51.1 | The *currency of this contract* is the | **South African Rand.** |
| 51.2 | The period within which payments are made is | **30 Calendar days after final assessment approval. 30 Calendar days after receipt of a valid tax invoice.** |
| 51.4 | The *interest rate* is | **the publicly quoted prime rate of interest (calculated on a 365days year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and**  **(ii) The LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption “Money Rates” in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted *mutatis mutandis* every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.** |
| **6** | **Compensation events** |  |
| 60.1(13) | The place where weather is to be recorded is: |  |
|  | **Medupi Power Station** |
|  | The *weather measurements* to be recorded for each calendar month are, | **the cumulative rainfall (mm)** |
|  |  | **the number of days with rainfall more than 10 mm** |
|  |  | **the number of days with minimum air temperature less than 0 degrees Celsius** |
|  |  | **the number of days with snow lying at 09:00 hours** |

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|  |  | **South African Time** |
|  |  | **and these measurements:** |
|  | The *weather measurements* are supplied by | **The South African Weather Services** |
|  | The *weather data* are the records of past *weather measurements* for each calendar month which were recorded at: | **Medupi Power Station** |
|  | and which are available from: | **the South African Weather Bureau** |
| **7** | **Title** | **Design and Construction of Drainage, Access and Terracing at Ash Dump workshop, Substation and surroundings** |
| **8** | **Risks and insurance** |  |
| 80.1 | These are additional *Employer*'s risks | Failure for the *Contractor* to provide the insurances stated on clause Z13 Insurance Table A. |
|  |  | Loss of production due to operation disturbance |
| **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.** |
| W1.1 | The *Adjudicator* 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**](http://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 *Adjudicator nominating body* 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**](http://www.ice-sa.org.za/) **) or its successor body.** |
| W1.4(2) | The *tribunal* is: | Arbitration. |
| W1.4(5) | The *arbitration procedure* is | **the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.** |

The place where arbitration is to be held is

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

### 12 Data for secondary Option clauses

**Price adjustment for inflation**

**Johannesburg, South Africa**

X1.1(c)

X1.1(a)

**X1**

**The Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.**

The *base date* for indices is **The contract is 12 months therefore CPA is not**

**applicable. Should the contract go beyond 12 months then the indices will be discussed with the successful tender**

The proportions used to calculate the

Price Adjustment Factor are: proportion

0.0

0.0

linked to index for SEIFSA

Adjustable non-adjustable

Index prepared by

**X2 Changes in the law** There is no reference to Contract Data in this Option

and terms in italics are identified elsewhere in this Contract Data.

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| **X5** | **Sectional Completion** | | | |
| X5.1 | The *completion date* for each *section* of the *works* is: | ***Section*** | **Description** | ***Completion date*** |
|  | **1** | | **Survey including fieldwork/site visit (Construction Complete)** | **As per accepted Program** |
|  | **2** | | **Geotechnical investigation and material testing (Construction Complete)** | **As per accepted Program** |
|  | **3** | | **Review, Design Report and drawings (Construction Complete)** | **As per accepted Program** |
|  | **4** | | **Preliminary and General, including construction monitoring, office and office run costs (Construction Complete)** | **As per accepted Program** |
|  | **5** | | **Monitoring by Engineers (Construction Complete)** | **As per accepted Program** |
|  | **6** | | **Shaping and Terracing area between Ash Dump Workshop (Construction Complete)** | **As per accepted Program** |
|  | **7** | | **Storm water Concrete Drain and Earth drain (Construction Complete)** | **As per accepted Program** |
|  | **8** | | **Access Road and parking area with block paving finish (Construction Complete)** | **As per accepted Program** |
|  | **9** | | **Landscaping (Construction Complete)** | **As per accepted Program** |
|  | **10** | | **Contract close-out documentations i.e., data books, pec reports, cc report, as-builts, operations and maintenance manuals (Construction Complete)** | **As per accepted Program** |

**X5 & X7**

X7.1 X5.1

**Sectional Completion and delay damages used together**

Delay damages for late Completion of the *section*s of the *works* are:

***Section***

**1**

**2**

**3**

**4**

**5**

**Description**

**Survey including fieldwork/site visit**

**Geotechnical investigation and material testing**

**Review, Design Report and drawings**

**Preliminary and General, including construction monitoring, office and office run costs**

**Monitoring by Engineers**

**Amount per day**

**0.05% of the total of the Prices at the Contract Date**

**0.05% of the total of the Prices at the Contract Date**

**0.05% of the total of the Prices at the Contract Date**

**0.05% of the total of the Prices at the Contract Date**

**0.05% of the total of the Prices at the Contract Date**

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|  |  | **6**  **7**  **8**  **9**  **10** | **Shaping and Terracing area between Ash Dump Workshop**  **Storm water Concrete Drain and Earth drain**  **Access Road and parking area with block paving finish**  **Landscaping**  **Contract close-out documentations i.e. data books, pec reports, cc report, as-builts, operations and maintenance manuals** | | **0.05% of the total of the Prices at the Contract Date**  **0.05% of the total of the Prices at the Contract Date**  **0.05% of the total of the Prices at the Contract Date**  **0.05% of the total of the Prices at the Contract Date**  **0.05% of the total of the Prices at the Contract Date** |
| Remainder of the *works* |  |
| The total delay damages payable by the *Contractor* does not exceed: | **10% of the total Contract Price** | | |  |
| **X13** | **Performance bond** | | | | |
| X13.1 | The amount of the performance bond is | **10% of the contract value at Contract Date** | | | |
| **X16** | **Retention** | | | | |
| X16.1 | The *retention free amount* is | **R0.0** |  |  |  |
| The *retention percentage* is | **5 % of the total of the Prices** | | |  |
| **X17** | **Low performance damages** | | | | |
| X17.1 | The amounts for low performance damages are: | **Amount** |  | **Performance level** | |
|  | **10% of the total Contract Price** | | **Standing water that clears within 8 hours after rainfall event** | |

**X18 Limitation of liability**

X18.1 The *Contractor*’s liability to the *Employer* for indirect or consequential loss is limited to:

X18.2 For any one event, the *Contractor*’s liability to the *Employer* for loss of or damage to the *Employer*’s property is limited to:

X18.3 The *Contractor*’s liability for Defects due to his design which are not listed on the Defects Certificate is limited to

**R0.0 (zero Rand)**

**the amount of the deductibles relevant to the event**

The greater of

* the total of the Prices at the Contract Date and
* The amounts excluded and unrecoverable from the *Employer*’s assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date.

X18.4 The *Contractor*’s total liability to the *Employer* for all matters arising under or in connection with this contract, other than excluded matters, is limited

The total of the Prices other than for the additional excluded matters.

The *Contractor’s* total liability for the additional

|  |  |  |
| --- | --- | --- |
|  | to: | excluded matters is not limited.  The additional excluded matters are amounts for which the *Contractor* is liable under this contract for   * Defects due to his design which arise before the Defects Certificate is issued, * 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 *end of liability date* is | 1. 1 (One) years after the *defects date* for latent Defects and 2. 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.   A latent Defect is a Defect which would not have been discovered on reasonable inspection by the *Employer* or the *Supervisor* before the *defects date*, without requiring any inspection not ordinarily carried out by the *Employer* or the *Supervisor* during that period.  If the *Employer* or the *Supervisor* do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the *Employer* or the *Supervisor* to have discovered the Defect. |
| **Z** | **The *Additional conditions of contract* are** |  |
|  | **Z1 to Z15 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 | |

|  |  |
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|  | 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** | **Confidentiality** |
| Z4.1 | The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient. |
| Z4.2 | If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Project Manager*. |
| Z4.3 | In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed. |
| Z4.4 | 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*. |
| Z4.5 | The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause. |
| **Z5** | **Waiver and estoppel: Add to core clause 12.3:** |
| Z5.1 | Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties*,* the *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. |

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| **Z6** | **Health, safety and the environment: Add to core clause 27.4** |
| Z6.1 | The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *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. |
| Z6.2 | 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. |
| **Z7** | **Provision of a Tax Invoice and interest. Add to core clause 51** |
| Z7.1 | Within one week of receiving a payment certificate from the *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. |
| Z7.2 | If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made. |
| Z7.3 | The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer*’s VAT number 4740101508 on each invoice he submits for payment. |
| **Z8** | **Notifying compensation events** |
| Z8.1 | 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”. |
| **Z9** | ***Employer’s* limitation of liability** |
| Z9.1 | The *Employer’s* liability to the *Contractor* for the *Contractor’s* indirect or consequential loss is limited to R0.00 (zero Rand) |
| Z9.2 | The *Contractor*’s entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the  *Employer*’s liability under the indemnity is limited. |

|  |  |
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| **Z10** | **Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":** |
| Z10.1 | or had a business rescue order granted against it. |
| **Z11** | **Addition to secondary Option X7 Delay damages (if applicable in this contract)** |
| Z11.1 | If the amount due for the *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. |

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| --- | --- | --- |
| **Z12** | **Ethics** |  |
| For the purposes of this Z-clause, the following definitions apply: | | |
| **Affected Party** | | means, as the context requires, any party, irrespective of whether it is the *Contractor* or a third party, such party’s employees, agents, or Subcontractors or Subcontractor’s employees, or any one or more of all of these parties’ relatives or friends, |
| **Coercive Action** | | means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally, |
| **Collusive Action** |  | means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally, |
| **Committing Party** | | means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractor or the Subcontractor’s employees, |
| **Corrupt Action** | | means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party, |
| **Fraudulent Action** | | means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation, |
| **Obstructive Action** | | means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and |
| **Prohibited Action** |  | means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action. |
| Z12.1 | A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof. | |
| Z12.2 | The *Employer* may terminate the *Contractor*’s obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor*’s obligation to Provide the Services for this reason. | |
| Z12.3 | If the *Employer* terminates the *Contractor*’s obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2. | |

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| Z12.4 | A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation. |
| **Z13** | **Insurance** |
| **Z 13.1** | **Replace core clause 84 with the following:** |

**Insurance cover 84**

* 1. When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
  2. The *Contractor* provides the insurances stated in the Insurance Table A.
  3. The insurances provide cover for events which are at the *Contractor*’s risk from the *starting date* until the earlier of Completion and the date of the termination certificate.

**INSURANCE TABLE A**

|  |  |
| --- | --- |
| Insurance against | Minimum amount of cover or minim limit of indemnity |
| Loss of or damage to the *works*, Plant and Materials | The replacement cost where not covered by the *Employer*’s insuranc  The *Employer*’s policy deductible, as Contract Date, where covered by the *Employer*’s insurance |
| Loss of or damage to Equipment | The replacement cost |
| Liability for loss of or damage to property (except the *works*, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) caused by activity in connection with this contract | Loss of or damage to property  *Employer*’s property  The replacement cost where not covered by the *Employer*’s insurance  The *Employer*’s policy deductible, as Contract Date, where covered by the *Employer*’s insurance  Other property  The replacement cost  Bodily injury to or death of a person The amount required by applicable l |
| Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract | The amount required by the applica law |

**Z 13.2 Replace core clause 87 with the following:**

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

**INSURANCE TABLE B**

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

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| --- | --- |
| **Z14** | **Nuclear Liability** |
| Z14.1 | The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa and is the holder of a nuclear license in respect of the KNPS. |
| Z14.2 | The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 44 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*. |
| Z14.3 | Subject to clause Z14.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*. |
| Z14.4 | The *Employer* does not waive its rights provided for in section 30 (7) of Act 44 of 1999, or any replacement section dealing with the same subject matter. |
| Z14.5 | The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned. |

|  |  |  |
| --- | --- | --- |
| **Z15** | **Asbestos** | |
| For the purposes of this Z-clause, the following definitions apply: | | |
| **AAIA** |  | means approved asbestos inspection authority. |
| **ACM** |  | means asbestos containing materials. |
| **AL** |  | means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL. |
| **Ambient Air** | | means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet. |
| **Compliance Monitoring** | | means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard’s requirements for safe processing, handling, storing, disposal and  phase-out of asbestos and asbestos containing material, equipment and articles. |
| **OEL** |  | means occupational exposure limit. |
| **Parallel Measurements** | | means measurements performed in parallel, yet separately, to existing measurements to verify validity of results. |
| **Safe Levels** | | means airborne asbestos exposure levels conforming to the Standard’s requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment, and articles. |
| **Standard** |  | means the *Employer*’s Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles. |
| **SANAS** |  | means the South African National Accreditation System. |
| **TWA** |  | means the average exposure, within a given workplace, to airborne asbestos fibres, normalized to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA. |
| Z15.1 | The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) (“Asbestos Regulations”). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM. | |
| Z15.2 | Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor*’s expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan. | |
| Z15.3 | The *Employer* manages asbestos and ACM according to the Standard. | |

|  |  |
| --- | --- |
| Z15.4 | In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe. |
| Z15.5 | The *Contractor*’s personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable. |
| Z15.6 | The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001. |
| Z15.7 | Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer*’s expense, and  conducted in line with South African legislation. |

C1.2 Contract Data

**Part two - Data provided by the *Contractor***

**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 *Contractor* is |  |
| Address |
| Tel No. |
| Fax No. |
| 11.2(8) | The *direct fee percentage* is | **%** |
| The *subcontracted fee percentage* is | **%** |
| 11.2(18) | The *working areas* are the Site and |  |
| 24.1 | The *Contractor's* key persons are: | **CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .** |
| 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](http://www.ecs.co.za/)

|  |  |  |
| --- | --- | --- |
| 11.2(3) | The *completion date* 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 *Contractor*’s design is in: |  |
| 31.1 | The programme identified in the Contract Data is |  |
| **A** | **Priced contract with activity schedule** |  |
| 11.2(20) | The *activity schedule* is in | **(in figures)**  **(in words), excluding VAT** |
| 11.2(30) | The tendered total of the Prices is |
| **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 ls it of Equipment is the last edition of the list published by**  **The percentage for adjustment for Equipment in the published list is** |  |
| **22 in SCC** | **The rates of other Equipment are** |  |
| 1. **in SCC** 2. **in SSCC** | **The hourly for Defined Cost of design outside the Working Area are**  **Note: Hourly rates are estimated ‘cost to company of the employee’ and not selling rate.**  **Please insert another schedule if foreign resources may also be used**  **The percentage for design overheads is** |  |

C1.3 Forms of Securities

## Pro formas for Bonds & Guarantees

For use with the NEC3 Engineering & Construction Contract

The *conditions of contract* stated in the Contract Data Part 1 include the following Secondary Options: Option X13: Performance Bond

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

Option X16:

The *Contractor* may provide a Retention Money Guarantee in the form stated here. When the *Employer* receives and accepts a Retention Money Guarantee exactly in the form stated he will instruct the *Project Manager* not to assess any amount be retained in terms of secondary Option X16.

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

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

# Pro forma Performance Bond – Demand Guarantee (for use with Option X13)

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

|  |  |
| --- | --- |
| **Eskom Holdings SOC Ltd Megawatt Park**  **Maxwell Drive Sandton Johannesburg** | Date: |

Dear Sirs

Reference No. **[●]** *[Drafting Note: Bank reference number to be inserted]*

**Performance Bond – Demand Guarantee**: *[Drafting Note: Name of Contractor to be inserted]*

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

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

“Bank” - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted] “Bank’s Address” - means [●]; [Drafting Note: Bank’s physical address to be inserted]

“Contract” – means the written agreement relating to the Project, entered into between Eskom and the Contractor, on or about the [●] day of [●] 200[●] (Contract Reference No. [.]as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted]

“Contractor” – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]

“Eskom” - means Eskom Holdings SOC Ltd, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30].

“Expiry Date” - means the date on which the Defects Certificate is issued in terms of the Contract. “Guaranteed Sum” - means the sum of R [●] ([●] Rand);

“Project” - means [insert if applicable.].

At the instance of the Contractor, we the undersigned and , in our respective capacities as and of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of Eskom, as security for the proper performance by the Contractor of all of its obligations in terms of and arising from the Contract and hereby undertake to pay to Eskom, on written demand from Eskom received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.

A demand for payment under this guarantee shall be made in writing at the Bank’s address and shall:

be signed on behalf of Eskom by a Group Executive, Divisional Executive, Senior General Manager, General Manager or its delegate;

state the amount claimed (“the Demand Amount’);

state that the Demand Amount is payable to Eskom in the circumstances contemplated in the Contract.

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

is and shall be absolute provided demand is made in terms of this bond in all circumstances; and is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.

The Bank’s obligations in terms of this Guarantee:

shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and

shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed, by the fact that a dispute may exist between Eskom and the Contractor.

Eskom shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.

Should Eskom cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then Eskom shall be entitled to cede to such third party the rights of Eskom under this Guarantee on written notification to the Bank of such cession.

This Guarantee:

shall expire on the Expiry Date until which time it is irrevocable;

is, save as provided for in [0](#_bookmark0) above, personal to Eskom and is neither negotiable nor transferable; shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof; shall be regarded as a liquid document for the purpose of obtaining a court order; and

shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.

Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the

Bank’s Address.

Signed at Date

For and behalf of the Bank

Bank Signatory: Bank Signatory:

Witness: Bank’s seal or stamp

Witness:

# Pro forma Retention Money Guarantee (may be used when Option X16 applies)

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

|  |  |
| --- | --- |
| **Eskom Holdings SOC Limited Megawatt Park**  **Maxwell Drive Sandton Johannesburg** | Date: |

Dear Sirs

Reference No. **[●]** *[Drafting Note: Bank reference number to be inserted]*

**Retention Money Guarantee**: *[Drafting Note: Name of Contractor to be inserted]*

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

1. In this Guarantee the following words and expressions shall have the following meanings:-
   1. “Bank” - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]
   2. “Bank’s Address” - means [●]; [Drafting Note: Bank’s physical address to be inserted]
   3. “Contract” – means the written agreement relating to the Project, entered into between Eskom and the Contractor, on or about the [●] day of [●] 200[●] (Contract Reference No. as

amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted]

* 1. “Contractor” – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]
  2. “Eskom” - means Eskom Holdings SOC Limited, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30
  3. “Expiry Date” - means the date on which the Defects Certificate is issued in terms of the Contract.
  4. “Guaranteed Sum” - means the sum of R [●] ([●] Rand); [Drafting Note: Insert amount of Retention Money Guarantee.].

1.8 “Project” - means the…………………………………..

1. At the instance of the Contractor, we the undersigned and , in our respective capacities as and of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of Eskom, as security for the proper performance by the Contractor of all of its obligations in terms of and arising from the Contract and hereby undertake to pay to Eskom, on written demand from Eskom received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.
2. A demand for payment under this guarantee shall be made in writing at the Bank’s address and shall:
   1. be signed on behalf of Eskom by a director of Eskom or his authorised delegate.
   2. state the amount claimed (“the Demand Amount’);
   3. state that the Contractor has failed to carry out his obligation(s) to rectify certain defect(s) for which he is responsible under the Contract (and the nature of such defect(s)) alternatively that the Demand Amount is payable to Eskom in the circumstances contemplated in the Contract.
3. Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank’s obligation/s to make payment:
   1. is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
   2. is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
4. The Bank’s obligations in terms of this Guarantee:
   1. shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
   2. shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed by the fact that a dispute may exist between Eskom and the Contractor.
5. Eskom shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.
6. Should Eskom cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then Eskom shall be entitled to cede to such third party the rights of Eskom under this Guarantee on written notification to the Bank of such cession.
7. This Guarantee:
   1. shall expire on the Expiry Date until which time it is irrevocable;
   2. is, save as provided for in [**0**](#_bookmark0)above, personal to Eskom and is neither negotiable nor transferable;
   3. shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
   4. shall be regarded as a liquid document for the purpose of obtaining a court order; and
   5. shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.
   6. Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
8. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank’s Address.

Signed at Date Bank’s seal or stamp

For and behalf of the Bank

Bank Signatory: Bank Signatory:

Witness: Witness: \_

# PART 2: PRICING DATA

**ECC3 Option A**

|  |  |  |
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| **Document reference** | **Title** | **No of pages** |
| C2.1 | Pricing assumptions: Option A | 1 |
| C2.2 | The *activity schedule* | 3 |

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 *activity schedule* unless later changed in accordance with this contract. |
|  |  | (27) The Price for Work Done to Date is the total of the Prices for   * each group of completed activities and * each completed activity which is not in a group.   A completed activity is one which is without Defects which would either delay or be covered by immediately following work. |
|  |  | (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*.

1. **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.

C2.2 the *activity schedule*

|  |  |  |
| --- | --- | --- |
| ITEM | DESCRIPTION | AMOUNT |
|  |  |  |
|  |  |  |
| 1 | Surveying including fieldwork/ site visit | R |
|  |  |  |
| 2 | Geotechnical Investigations and material testing | R |
|  |  |  |
| 3 | Review, Design Report and drawings | R |
|  |  |  |
| 4 | Preliminary and General, including construction monitoring, office and office run costs. | R |
| 5 | Monitoring by Engineers: | R |
|  |  |  |
| 6 | Shaping and Terracing area between Ash Dump Workshop | R |
|  |  |  |
| 7 | Storm water Concrete Drain and Earth drain | R |
|  |  |  |
| 8 | Access Road and Parking area with block paving finish | R |
|  |  |  |
| 9 | Landscaping | R |
|  |  |  |
| 10 | Contract close-out documentations i.e. data books, pec reports, cc report, as-builts, operations and maintenance manuals | R |
|  |  |  |
| **TOTAL** |  | **R** |

#### PART 3: SCOPE OF WORK

|  |  |  |
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8. **Description of the *works***

#### Executive overview

Medupi Power Station is a coal fire power station and a National Key Point situated near Lephalale in Limpopo Province. The Medupi Ash Dump Workshop has experienced inadequate drainage with water ponding near the facility that has compromised access to the workshop. Generation has raised a concern regarding the current suitability of the drainage in the area and requested remedial measures be undertaken to correct the ponding water.

The Employer, Eskom SOC, had previously entered into a professional engineering services contract for the design, construction monitoring, professional certification, technical assurance of construction works, and provision of end of construction documentation i.e. as built documentation and Professional Engineering Certificates (PEC’s) for the Medupi Ash Dump Workshop, stormwater drainage, access and terracing. The professional engineering services contract between the Employer and the originally appointed designer has ended. This has left the Employer with incomplete works.

This scope aims to complete the outstanding work to allow for adequately function drainage and access to the Ash Dump Workshop and Substation.

The Employer has resolved to issue the existing designs as conceptual designs to the open market and invite all interested parties to provide professional design and construction services for the works.

#### Objectives

The objectives of the Works is to design and construct the Drainage, Access and Terracing at the Ash Dump Workshop, Substation and Surrounds at Medupi Power Station.

#### Purpose

The purpose of this Works Information is to identify the *Works* required for the design and construction of the Drainage, Access and Terracing at the Ash Dump Workshop, Substation and Surrounds at Medupi Power Station.

#### Interpretation and terminology

|  |  |
| --- | --- |
| **Definition** | **Meaning given to the Definition** |
| Acceptance | The *Employer* accept the condition or design but does not take responsibility from the *Contractor* |
| Approval | Written agreement or authorization by *Employer*. All requests for approval must be submitted in writing and any proposed deviation from specified requirements must be fully justified and agreed by *Employer*. |
| Blitz | A planned but unannounced inspection at a pre-determined site with a specific goal. |
| Common Plant | The services that is common to all units and any other plant which is not directly applied for unit operation. |
| *Contractor’s* Design Documents | *Contractors* design documents include the schematic drawings, general arrangement drawings etc. prepared by the *Contractor* for the Works. |
| Design Freeze | is a binding decision that defines the whole product, its parts or parameters and allows the continuation of the design based on that decision (no further changes can be made to the design, it is cut-off for the engineers) |
| *Employer’s*  Schematics | There are standard drawings developed by the *Employer*, to be used as a basis for developing detail design drawings for all the functional circuits. |
| Interface | Interface in these document means either to hard wired or software interaction between the *Contractors* and Others design or works |
| Others | Others, as defined in these documents includes the HVAC *Contractor*s, Civil *Contractor*s, Electrical *Contractor*s, C&I *Contractor*s and Mechanical *Contractor*s constructing work for the *Employer* on site. |
| Master Program | Is the integrated program of the *Employer* |
| Project | Medupi Eastern Seasonal Coal Stockyard and Roads Construction Project. |
| Plant Area | Means the Balance of Plant including Coal Stockyard area. |
| Specification | The document/s forming part of the contract in which are described the methods of executing the various items of work to be done, and the nature and quality of the materials to be supplied and includes technical schedules and drawings attached thereto as well as all samples and patterns. |
| Station/Power Station | Medupi Power Station. |
| Others | Are people or organisations who are not the *Employer,* the *Project Manager*, the *Supervisor*, the *Adjudicator*, the *Contractor* or any employee Sub*contractor* or supplier of the *Contractor* |
| Covid-19 | Corona Virus Disease 2019 – A communicable respiratory disease caused by a new strain of coronavirus that causes illness in humans. |

* + 1. **Definitions Table 1: Definitions**

#### Abbreviations

The following abbreviations are used in this Works Information:

#### Table 2: Abbreviations

|  |  |
| --- | --- |
| **Abbreviation** | **Meaning given to the abbreviation** |
| AFC | Approved for construction |
| ASGISA | Accelerated Shared Growth Initiative |
| BBSO | Behavioural-Based Safety Observations |
| CAD | Computer Aided Design |
| CEMS | Continuous Emissions Monitoring System |
| CD | Compact Disc |
| CDSS | Contractor Documentation Submission Schedule |
| CEC | Compensation Event Committee |
| CFC | Customer Foreign Currency |
| CIDB | Construction Industry Development Board |
| CM | Configuration Management |
| COC | Certificate of Compliance |
| CPA | Contract Price Adjustment |
| CPM | Critical Path Method |
| COIDA | Compensation for Occupational Injuries and Diseases Act |
| CSY | Coal Stockyard |
| DCS | Digital Control System |
| DOEL | Department of Employment and Labour |
| DSTI | Daily Safe Task Instruction |
| DVD | Digital Video Disc |
| DWG | Drawings |
| DWS | Department of Water and Sanitation |
| EA | Environmental Authorisation |
| ECSA | Engineering Counsel of South Africa |
| ECSA | Engineering Counsel of South Africa |
| EMP | Environmental Management Plan |
| EMS | Environmental Management System |
| FAT | Factory Acceptance Test |

|  |  |
| --- | --- |
| HIRA | Hazard Identification & Risk Assessment |
| HDPE | High-density Polyethylene |
| ITP | Inspection and Test Plans |
| JSA | Job Safety Analysis |
| KKS | Kraftwerk Kennzeichen System |
| MDL | Master Documentation List |
| MIE | Master Installation Electrician |
| NDP | National Development Plan |
| NGP | New Growth Path |
| OHSA | Occupational Health and Safety Act |
| O&M | Operation and Maintenance |
| PDF | Portable Document Format |
| PCARS | Preventative corrective action reports |
| PEC | Professional Engineering Certificate |
| PER | Pressure Equipment Regulations |
| PLA | Project Labour Agreement |
| PPE | Personal Protective Equipment |
| PPPFA | Preferential Procurement Policy Framework Act |
| P&ID | Piping and Instrumentation Diagram |
| QA | Quality Assurance |
| QCP | Quality Control Plan |
| QMS | Quality Management System |
| RACI | Responsible, Accountable, Consulted and Informed |
| ROD | Record of Decision |
| SANS | South African National Standards |
| SAT | Site Acceptance Test |
| SETA | Sector Education & Training Authority |
| SIT | Site Inspection Test |
| SACPCMP | South African Council for the Project and Construction Management Professions |
| SHEQ | Safety Health Environment and Quality |
| SPO | Smart Plant Owner Operator |

|  |  |
| --- | --- |
| TOC | Take Over Certificate |
| TVET | Technical and Vocational Education and Training |
| URS | User Requirements Specification |
| VAT | Value Added Tax |
| VDSS | Vendor Documentation Submission Schedule |
| VFL | Visible felt leadership |
| WBS | Work Breakdown Structure |
| WIL | Workplace Integrated Learning |
| WISPA | Web integrated system of process and application |
| XER | eXport Eagle Ray |
| ECSA | Engineering Counsel of South Africa |
| EMP | Environmental Management Plan |

#### Interpretation

Any reference to the *Contractor* includes a reference to his personnel, Sub*contractor*s including the Designer and Construction Monitoring Services, Employees and Agents and/or Suppliers.

All references to the “*Employer*” in this Works Information may be a reference to “*Project Manager*” and/or “*Supervisor*” as may be applicable.

In addition to the requirements stated in the Contract and notwithstanding that it may not be expressly stated, the *Contractor* complies with all Eskom Standards and the Medupi Power Station requirements in fulfilling his obligations under the Contract.

All references to “commissioning” include both hot commissioning and cold commissioning unless expressly stated otherwise.

#### Management and start up.

#### Management meetings

Meetings of a specialist nature will be convened as specified in this Works Information by persons specified and at specified times and locations that will suit the Parties to discuss progress of the *works*. Records of these meetings shall be submitted to the *Project Manager* by the person convening the meeting within five (5) working 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.

Regular meetings of a general nature may be convened and chaired by the *Project Manager*. Meetings will be held monthly between the *Project Manager* and the *Contractor* and any person instructed by the *Project Manager* to attend. The *Contractor* is to be represented at each meeting by the appropriate member of the staff. Additional ad hoc meetings may also be called to address urgent issues.

The *Project Manager* will, as and when necessary, require the *Contractor* to attend meetings with other *Contractor*s on the Project to address integration, interface and other project related matters. This requirement does not constitute a compensation event. The *Contractor* may be required to hold meetings outside normal working hours either (face to face or on Virtual Platform) by the *Employer*.

The venue for these meetings will be determined by the *Project Manager*. The *Project Manager* writes the minutes of meetings and circulates to attendees within five (5) working days of the meeting.

Any action of the *Project Manager* and the *Contractor* implied in the minutes of meetings to have Cost, Time, Safety and Quality impact is confirmed by a separate formal communication between the *Project Manager* and the *Contractor*.

The *Contractor* reports the overall progress and as a minimum requirement:

* *Contractor’s* current activity progress and planned finish dates
* *Contractor’s* planned start and finish dates for the *works*
* *Contractor* and *Project Manager*’s programme agenda current and projected manpower by class
* Health, Safety and Quality issues
* The progress of any othe*r* relevant activities
* Discussion on any technical and commercial issues
* Problem areas or concerns (Delays , Compensation events etc)
* Progress on Procurement of Plant and Material
* Design and Construction Monitoring Progress
* Risk Reduction

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

#### Table 1: Meetings Schedule

|  |  |  |  |
| --- | --- | --- | --- |
| **Title and purpose** | **Approximate time & interval** | **Location** | **Attendance by:** |
| Risk register and compensation events | Weekly at Medupi *Employer* Offices on a day and time that will be determined by the *Project Manager* | Venue determined by the *Project Manager* | Relevant appointed members of a Risk or and Compensation event committee that will include *Contractors* Project Manager, Construction Manager, Engineering Manager, Quality Manager, Safety Manager, Environmental Manager |
| Overall contract progress and feedback | Monthly | Venue determined by the *Project Manager* | *Employer*, *Contractor*, *Supervisor*, |

|  |  |  |  |
| --- | --- | --- | --- |
| Overall contract progress and feedback during execution | Weekly | Venue determined by the *Project Manager* | *Employer, Contractor*,  Supervisor  as determined by the *Project Manager* |
| Planning Meetings | Weekly | Venue determined by the *Project Manager* | *Employer*, *Contractor*, Supervisor, Planner and Others as determined by  the *Project Manager* |
| Integration meetings with Others | Weekly | Venue determined by the *Project Manager* | *Employer, Contractor*, *Supervisor,* Planners and Others as determined by the *Project Manager* |
| Safety Meetings | Monthly | Venue determined by the *Project Manager* | *Employer, Contractor, Supervisor*  Safety Officers and Others as determined by the *Project Manager* |
| Environmental Contractors Meetings | Monthly | Venue determined by the Project Manager | *Employer, Contractor, Supervisor*  *Safety Officers and Others as determined by the Project Manager* |

* 1. **Documentation Management**

The *Contractor* complies with the requirements of the Project Documentation Deliverable Requirement specification referenced in the Works Information and stipulated as follows:

|  |  |
| --- | --- |
| **Submission: -** All submissions to the *Employer*, the language of all documentation is to be in English. Documentation submissions must be through either email or walk-in to documentation centre with CD and/or hard copies. In case submission of documentation is through email, take note of the following: | |
|  | * Email submissions must be directed to the proxy email and copy all recipient(s) as per the distribution matrix, which will be provided by the project manager. * Use emails strictly as a channel for submitting documentation. All information required and intended for use by the *Employer*, may not be part of the body of the email, one must document it. * Email must not be used as a transmittal, one must use a transmittal template * The email subject must always include the transmittal number, package number/contract number. |
| **Large file transfer: -** Documentation submission with the file size that exceeds the outlook maximum size, contractor must submit via the Employer’s large file transfer portal, CD/DVD, and/or hard drives to the Eskom Project Documentation Centre. The contractor/\vendor must notify the employer in advance via email, with the transmittal note attached, to confirm the date, time and method of submitting large files. Method option may be CD/DVD and/or hardrives, which is a walk into Documentation centre or large file transfer portal.  All submissions, the receiver must acknowledge by sending back a signed transmittal to the sender within two working days upon receipt. | |
|  | * Every submission must have the PDF version and the Native (Editable) version. The file name for both the PDF and the Native must be the same, and as minimum contain Documentation Number and revision. * One must list all items intended for submission, on the transmittal. If the pack contains 10   documentations, therefore the transmittal must contain 10 items on the list. The listing must include as minimum, the documentation number, title and revision. The example of |

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|  | 10 items, will equate to a pack of 10 PDF files and 10 Native files, because each PDF files must have a native file. |
| **Identification: -** Documentation must have a unique documentation identifier for audit trail. The transmittal must also have the unique identifier. All other documentation properties must be on the document; to supplement the document number. Minimum properties that must be on the document is the package number, contract, revision number, KKS code, functional area (example Unit 1), document type, document status, compiler, reviewer(s), approver, and approval date.  The primary documentation identifier is the Eskom Documentation Management System Generated number, except for the drawings. The primary number for the drawing is the Eskom drawing number with a prefix of 0.84. The *Contractor*\vendor must request in advance the drawings number(s) from the employer, to populate on the drawing before submission. The contractor/vendor must request pre-location of drawing numbers via the pre-allocation form (348- 684677)  All letters exchanged between the *Employer* and *Contractor*/\vendor will contain a secondary numbering system which is sequential, to account for the audit trail. Example, Eskom compiled letters must use this format P00-ESK-MED-0001,   * P00 = package number * ESK = Eskom * MED = Medupi * 0001 = sequential number.   *Contractor*/\vendor format must be P00-XXX-MED-0001, which is as follows:   * P00 = Package number * XXX = Contractor name abbreviation * MED = Medupi * 0001 = sequential number.   The *Employer* will allocate the Eskom documentation number upon submission from the *contractor*/vendor, except for drawings and data books. The *Contractor*/\vendor must request Eskom documentation number via the pre-allocation form (348-684677), for both the drawings and data books | |

The secondary or alternative documentation number is the contractor/\vendor Documentation identifier.

**Revision control: -** One must use only numeric revision control, and not alpha or alphanumeric. One may not skip revisions, track internal changes via version control, but submission to the *Employer* must maintain a sequential revision control, without screen numbers First submission must be revision 0.

Do not revise a record. A document must contain revision control. Design/drawing composed of multiple sheets (example sheet 1 to 10); one must revise all sheets as a batch, even if one only made changes to one sheet. The Contractor/Vendor must maintain revision control on the entire batch at all times and submit the entire batch always.

**Drawing Management: -** Use the *Employer*’s Drawing template and ensure that all the fields on the title block are populated and all signatures completed. Maintain the revision audit trial on the title block. The last submission of the drawing must be the final as-built drawing, both in PDF and native.

**Report: -** The *Contractor* shall submit the Vendor Documentation Submission Schedule to the *Employer*. The VDSS is revisable, and one must discuss any change to reach agreement between all parties, and then properly document the changes. Changes in the VDSS include additional documentation for submission; changes in submission dates; corrections in documentation descriptions and document numbers; etc. The *Contractor* shall be responsible for the management of the schedule. The *Contractor* must compile a documentation register, to track the documentation submission progress, in line with *Contractor*-committed dates on the VDSS.. The register for tracking submission progress is the master documentation list (MDL), *Contractor* must submit monthly to the *Employer*. The MDL must also list all other submissions not specified on the VDSS example letters

**Governance: -** *Contractor* must comply with the following governance. 348-883860: Medupi Format and Layout Specification; 348-883808 Medupi Document and Records Management Work Instruction; 240-86973501 Engineering Drawing Standard; 348-885429 Engineering Change Management Work Instruction; 240-86973501 Engineering Drawing Standard – Common Requirements; 240-53114186 Eskom Project/Plant Specific Technical Document and

Records Management Procedure, 240-83561037 Reporting and Data Requirements Specification for *Contractor*s, 348-942820 Transmittal Template, 200-616427 Data Book Checklist.

#### Configuration Management

**Scope Activity**

The *Contractor* is to prepare a Configuration Management (CM) plan utilizing ISO 10007 as a reference guide for the scope of work.

#### Codification

The *Contractor* to codify all equipment, and any components which are required to be codified as per the guidelines and standards referenced in this document. The Contractor to indicate equipment and component codification in drawings and documents indicating or referencing such plant.

The process of managing documentation for the project works will be supported by the following.

1. According to process functions: All plant shall be coded to KKS Breakdown Level 3.
2. According to points of installations: Electrical and Instrumentation devices installation units (e.g. cabinets, panels, consoles) shall be coded to KKS Breakdown Level 3.
3. Location codes: Plant structures shall be coded to KKS Breakdown Level 2.
4. Cables coding: Cables shall be coded with either source or destination equipment KKS code followed by sequential four-digit number and optional four alpha numeric characters.

The *Contractor* to submit all KKS codes designated by the *Contractor* in an Equipment List format with equipment descriptions, with the documents in which they were originally designated, to the *Employer* for review. Any description abbreviations shall be done according to the List of Abbreviations (200-5343).

The *Contractor* will remain responsible for ensuring that the codes designated are unique, not duplicated and meet the requirements established by the various standards applicable to the project. Where any ambiguities or doubts with regards to KKS codification exist, the *Contractor* to engage the *Employer* for resolution.

#### Plant Labelling and KKS Classification

The KKS system is used by the *Contractor* for classification and designation of both plant and associated documents. The *Contractor* uses *Employer*-specific interpretations of the KKS standards, which will be reviewed and agreed upon after Contract Date.

The *Contractor* shall manufacture and install labels according to the Medupi coding and Labelling specification, 200-3340.

Any abbreviations to plant descriptions shall be prepared in accordance to the *Employer’s*

abbreviation standard, 200-5343.

Detailed name plate or label lists with the service legends and including the KKS Code shall be prepared

by the *Contractor* and submitted to the *Employer* for review and comment before commencing the manufacture of the labels. On plant areas where labels do not make ergonomically sense please consult site configuration management for guidance.

* + 1. **Documentation to be supplied by the *Contractor***

The following documentations are to be supplied to the *Employer* by the *Contractor* as a minimum where applicable:

* + - * All Engineering clearance charts
      * Technical specifications for the spares, part numbers and the stock levels required
      * Relevant Procedures
      * Commissioning procedures
      * Performance test procedures
      * Installation reports
      * Supply of end of manufacturing reports for all components
      * Documentation for new/modified auxiliaries
      * List with new components KKS numbering
      * As-built drawings for each Unit. Design Package:
* Fault Levels and Load Flow Study
* Single Line Drawings
* Works Information
* Schematic Drawings
* Operating Philosophy
* Quality Control Plan
* Installation Procedure
* Maintenance Manual
* Operating Manual
* Technical Manual
* Instruction Manuals and/or Catalogues
* List of Recommended Spares
* Test procedure, Certificates and/or Report
* Test Instruments Calibration Certificates
* Design Review Packages

#### Health and safety risk management

#### General Safety

In carrying out its obligations to the *Employer* in terms of this Contract, which obligations include, amongst others, providing the Works; using Plant, Materials and Equipment; and whilst at the Site for any reason, the *Contractor* is the “*Employer*” in terms of the Occupational Health and Safety Act, No. 85 of 1993 (“the OHSA”) in respect of its activities and in relation to its employees, agents, *Contractor*s, Sub*contractor*s and mandataries. The *Contractor* ensures compliance by its employees, agents, sub-contractors, and mandatories with:

1. 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”) ;
2. By-laws of any local or statutory authority.
3. Provisions and requirements of the *Employer*’s SHE Specification a copy of which is attached to the Works Information.
4. Standards, procedures, specifications, rules, systems of work and requirements of Eskom and/or Medupi Power Station, copies of which will be provided to the *Contractor*.
5. The health and safety and Environmental plan prepared by the *Contractor* in accordance with the SHEQ Requirements.

(The *Employer’s* Specification and/or procedures 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 *Employer’s*

Regulations with which it has been provided.

(The OHSA and the *Employer’s* Regulations are collectively referred to as the “SHEQ Requirements”).

The *Contractor* appoints a person, qualified in accordance with the SHEQ Requirements, as the liaison with the *Employer’s* Safety/Environmental Officer for all matters related to health and safety, this person shall be contactable 24 hours a day.

The *Contractor* implements a comprehensive health and safety management system for utilisation at the Site in order to complete the Works. Such health and safety management system must comply with the provisions of the OHSA, the regulations binding in terms thereof as well as the Specifications. The *Contractor* ensures compliance with such health and safety management system by its employees, agents, *Contractor*s, Sub*contractor*s and mandataries.

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 is 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 *Employer’s* Safety/ Environmental Officer responsible for the premises relevant to this contract. The person so appointed shall, on request:

* 1. Supply the *Employer’s* Safety/ Environmental Officer with copies of minutes of all Health and Safety Committee meetings, whenever they are required to do so;
  2. Supply the *Employer’s* Safety/Environmental 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 *Employer’s* Safety Officer of any changes thereto.

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

1. Conduct health and safety and Environmental audits regarding all aspects of compliance with the SHEQ Requirements, at any off-site place of work, or the site establishment of the *Contractor*.
2. 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.
3. 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’s* Representative.

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.

In terms the Works information, the *Contractor* needs to ensure compliance to section 8 of the OHSA with regards to (General duties of the *Employer).*

#### Mandatary agreement(s)

1. The *Contractor* confirms that, in terms of sections 37(1) and 37(2) of the OHSA, the *Employer* is relieved of any and all of its responsibilities and liabilities pertaining to the activities performed by the *Contractor* (and its employees, agents, *Contractor*s, Sub*contractors* and mandataries) relating to the Works; the use of Plant, Machinery and Equipment whilst at the Site for whatsoever reason.
2. The *Contractor* confirms that it has been provided with sufficient information regarding the health and safety arrangements applicable to the Works; the use of Plant, Machinery and Equipment, as well as Site related *Employer’s* Safety Rules and Procedures.
3. Prior to the *Contractor* commencing with any operations/ activities relating to the Works and/or prior to gaining access to the Site, the *Contractor* concludes a written mandatary agreement with the *Employer* in terms of section 37(2) of the OHSA and 5(1)(k) under construction regulations. The aforementioned agreement constitutes a record of the written arrangements and procedures between the *Contractor* and *Employer* regarding Health and Safety.
4. The *Employer* further requires that prior to any *Contractor* and/or Sub*contractor* being allowed access to the Site, a mandatary Agreement and Induction must also be concluded between the *Contractor* and its Sub*contractor*s.

The *Contractor* confirms that it has been provided with sufficient written information regarding the health and safety as well as Environmental 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 *Employer’s* 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* acknowledges that they are 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* hereby indemnifies the *Employer* and holds the *Employer* harmless in respect of any and all loss, costs, claims, demands, liabilities, damage, penalties or expenses that may be made against the *Employer* and/or suffered or incurred by the *Employer* (as the case may be) as a result of, any failure of the *Contractor*, its employees, agents, Sub*contractor*s and/or mandataries to comply with their obligations, 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 and its regulations.

The *Contractor* indemnifies and holds the *Employer*, its directors and managers harmless for and against any claim, liability, damage, loss and expense the *Employer* may incur or sustain in respect of the death, injury or loss of an employee, agent, *Contractor*, sub-*Contractor* or mandatory of the *Contractor* arising from any act or omission of the *Contractor* or the *Employer* or any representative, agent or employee of the Company or the *Employer*, whether or not the claim, liability, damage, loss or expense, was known or unknown and whether or not it was foreseeable.

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 *Employer* expects the *Contractor* to engage in safety culture initiatives in line with the

*Employers* SHEQ policy and value, Zero Harm.

The *Contractor* must implement their OHS management system and requirements and incorporate the applicable Employer requirements into their system.

* + 1. **Compliance with legislation and other requirements**

It is required that all *Contractors* on the project comply with the relevant applicable legislation, specifications, and standards in accordance with the scope of the project.

It is the duty of the *Contractor* to ensure that they are familiar with the necessary OHS legislation required. Applicable acts/regulations should be displayed or available for employees, client and inspector when required.

When there is an amendment to acts and/or to the regulations, the OHS plan must be reviewed, updated accordingly, and send through to the client. Changes must be communicated to all relevant employees.

#### COID and UIF requirements

The *Contractor* shall be registered with an appropriate employment compensation commissioner or with a licensed compensation insurer and submit proof of good standing with the commissioner or insurer. The *Contractor* shall, before the commencement with work on site, furnish the *Employer* with proof of a valid registration through a certificate of good standing in terms of the Compensation for Occupational Injuries and Diseases Act, (COID Act), 130 of 1993 and that all payments due to the commissioner are discharged. This cover shall remain in force during the contract and shall be the responsibility of the *Contractor* to ensure validity. The letter of good standing shall reflect the name of the *Contractor.*

#### Occupational health and safety policy

The *Contractor* shall have an OHS/SHEQ policy authorised by their chief executive (OHS Act Section 16(1) appointee) that clearly states overall SHEQ objectives and commitment to improving safety and health of its employees. The policy should outline the arrangements for carrying out and reviewing that policy.

The *Employer* has a SHEQ Policy (32-727) that clearly states the policy principles by which the *Employer* operates and the commitment to SHEQ excellence and is authorised by the chief executive.

*Contractors* shall support the *Employer* SHEQ policy.

#### Section 37(2) Mandatory agreements

A section 37(2) agreement must be signed between the *Employer* and the *Contractor* at the time of awarding the contract. A signed copy of this agreement is submitted to the *Employer* prior to commencement of any activity on site. The *Contractor* must ensure that a section 37(2) agreement is signed between them and all their appointed Subcontractors for the contract.

Copies of all agreements must form part of the *Contractor’s* OHS file.

The original copy of the section 37(2) Agreement must be retained by the contractor and a copy retained by the responsible project manager.

#### Notification of Construction Work

The Principal *Contractor* shall notify the relevant Provincial Director of the Department of Employment and Labour of the intention to carry out any construction work as defined in the Construction Regulation 4 of the OHS Act, at least 7 days before construction work is to be carried out.

A copy of the notification letter sent to the DOEL shall be forwarded to the *Project Manager* on the same day as sent to the DOEL. A copy of the letter and their approval must be kept in the SHE files. When the DOEL provide a letter of approval, a copy of the approval must be sent to the Eskom *Project Manager* and a copy filed in the SHE files.

#### Annexure B: Eskom SHE Rules and Requirements

Annexure B is the acknowledgement of the *Employers* SHE rules, and requirements form signed and submitted by the *Contractor.*

#### SHE Induction and Access to Site

All the employees of the *Contractor* must attend the *Employers* SHEQ induction course provided by the *Employer* before commencement of the *works* will be allowed on the Site. It is the responsibility of the *Contractor* to ensure that all employees have attended the safety induction. *Contractor* shall further develop and train all its employees on company specific SHEQ induction. Proof of yearly induction should be always easily identifiable/available. Only once this induction has been received, will each employee receive a site access permit.

#### Public Safety

Legislation requires that the *Employer* shall be responsible, as far as reasonably practicable, for safeguarding persons other than those in their employment who may be directly affected by their activities so that they are not exposed to hazards to their health and safety (Section 9 of the OHS Act).

*Contractors* shall factor in, in their safety plan, how they intend safeguarding/ controlling any members of the public against their activities during the project

#### Safety Culture and BBSO

*Employer’s* drive a safety culture of Zero harm.

Visible commitment is essential in providing a safe work environment. Managers, supervisors and employees at all levels must demonstrate their commitment by being proactively involved in the day to day operations, in particular SHE aspects of any project / contract. Legislation requires

that each employee must take reasonable care of themselves and their fellow workers, being it management down to the lowest level employee. Visible felt leadership (VFL) is an essential requirement during the project execution on all levels.

*Contractor* shall demonstrate in health and safety plan compliance to *Employers* drive to Zero harm.

The following safety culture interventions are implemented across site and it is required that all

*Contractor*s participate in:

* Safety stand downs;
* Management Plant Walk about (VFL);
* SHE campaigns;
* Rewards and discipline strategies and procedures to encourage appropriate SHE behaviours.

The objective of Behavioural-Based Safety Observations (BBSO) is to assess and address the actual safe and unsafe behaviours of people in the workplace; as well as workplace conditions - which are caused by the actions or non-actions of employees, *Contractor*s or their *Supervisors*.

#### Employers lifesaving rules

The *Contractor* shall comply with the *Employers* lifesaving rules. Violation of these rules will be viewed in a serious light and the consequences will be dealt with via the respective disciplinary processes

Five (5) lifesaving rules have been developed that will apply to all *Employer* employees, agents, contractors, consultants, suppliers, and visitors. Failure to adhere to these rules will be considered a serious transgression. These rules are being implemented to prevent serious injury or death of any employee, labour broker or contractor working in any area within the *Employer*

*Employer* lifesaving rules are non-negotiable health and safety rules which must not be broken under any circumstances. It must be highlighted that the *Employer* takes a ZERO TOLERANCE stance to violation of these rules. These rules are applicable to any person entering the *Employers* sites.

The rules are as follows:

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| Rule 1 | **OPEN, ISOLATE, TEST, EARTH, BOND AND/OR INSULATE BEFORE TOUCH**  Any person who performs work on an electrical installation shall ensure that it is isolated, tested and earthed before starting any work.  (That is plant, any plant operating above 1000 V)  No person may work on any electrical network unless: |

|  |  |
| --- | --- |
|  | * He / she is trained and authorised as competent for the task to be done. * A pre-task risk assessment to identify all risks and hazards must be conducted prior to any work commencing. * An equipotential zone is created for each worker on the job site by earthling, bonding and/or insulating according to approved divisional procedures. * All conducting material is connected, all staff onsite wear electrical safety shoes and insulating techniques are applied according to standards. * The authorised person (Team leader) has certified and shown all team members that the apparatus is safe to work on. He / she is trained and authorised as   competent |
| Rule 2 | **HOOK UP AT HEIGHTS**  Working at Height is defined as any work performed above a stable work surface or where a person puts himself/herself in a position where he/she exposes himself/herself to a fall from or into. A pre-task risk assessment to identify all risks and hazards must be conducted prior to any work at height commencing. |
| Rule 3 | **BUCKLE UP**  Seatbelts shall be always used whilst driving. 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 be under the influence of intoxicating liquor or drugs while on duty. Under-the-influence’ means the use of alcohol, drugs and /or a controlled substance to the extent that:   * the individuals’ faculties are in any way impaired by the consumption or use of the substances or. * the individual is unable to perform in a safe, productive manner or. * the individual has a level of any such substance in his body that corresponds with or exceeds accepted medical/legal standards or. * the individual has a level of alcohol in his body that is greater than 0,00 % blood alcohol concentration. * Any level of an illegal substance in the body irrespective of when the substance   was used |

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| Rule 5 | **PERMIT TO WORK**  Where an authorisation limitation exists, no person shall work without the required Permit to Work (PTW).   * Work is as defined in the Plant Safety Regulations (OHS) and Operating Regulations for High Voltage Systems (ORHVS) of Eskom. * A Risk Assessment must be carried out jointly by the Authorised (AP) and Responsible Person (RP) on all work before it commences. * The PTW must be issued by an AP, in accordance with the PSR. * The PTW must be accepted in writing by an authorised RP. * The PTW shall be shown to everyone working on the job and the risks explained. * The RP must ensure that all staff working on that job are entered on a Workers’ Register and the risks explained to each one. * The RP must ensure that the conditions of the PTW are enforced for the duration   of the work. |

#### Designer: Roles, Accountabilities and Responsibilities

A designer is the person responsible for the overall management of the project design as well as ensuring the management of the compliance of the completed works to the design during and after construction on site.

Designers should ensure compliance with the Occupational Health and Safety Act in terms of Construction Regulations of 2014, Regulations 6, and all other applicable regulations, standards and legislations.

The designer shall consider the hazards associated with the future maintenance of the designed structure(s) and make provision in the design(s) for the necessary maintenance work to be performed such that the associated risks are minimised.

Designers should ensure that when they design for construction work they consider foreseeable health and safety risks during construction and eventual maintenance and cleaning of the structure in the balance with other design considerations, such as aesthetics and cost.

Inform the *Employer* in writing of any known or anticipated dangers or hazards relating to the *works*, and make available all relevant information required for the safe execution of the *works* upon being designed or when the design is subsequently altered.

The designer should apply the hierarchy of risk control. This means designers need to identify the hazards inherent in carrying out the *works* and where possible alter the design to avoid them. If

the hazards cannot be removed by design changes, the designer should minimize the risks and provide information about the risks that remain.

Make available in a report to the *Employer* all relevant health and safety information about the design of the relevant structure, geotechnical science aspects where appropriate and the loading structure is designed to withstand.

Designer should describe any matters that require particular attention by a Contractor. Enough information should be provided to alert Contractors and Others to matters which they could not be reasonably expected to know about.

Take into consideration and ensure compliance of health and safety specification.

In cases where the *Employer* uses offshore designers, the appointed designers must indicate and submit to the *Employer* the legislative requirements/documentation with which they comply to verify whether they meet the South African SHE legislative requirements.

An offshore designer can appoint a local designer to conduct the inspections required by the construction regulations.

Designers must communicate changes with the *Project Manager* on designs that affect environmental authorisations/approval issued. Final designs and layout maps must be approved by relevant authorities before the commencement of the *works*.

#### Contractor: Details, Accountabilities and Responsibilities

The *Contractor* carries primary accountability and responsibility for the health and safety of his/her employees within his/her working area, as contemplated by Section 37(2) of the OHS Act No. 85 of 1993 and Regulations. None of the additional safety requirements specified by the *Employer* reduces the *Contractor’s* accountability and responsibility for the health and safety of his employees within his working area.

The *Contractor* shall have a disciplinary process and an organisational structured procedure to deal with employees who have transgressed organisational and legal requirements.

The *Contractor* shall provide a list of names and contact telephone numbers of all his employees on site. This list shall be updated as and when new employees commence on site.

The *Contractor* shall keep a record of all employees, including date of induction, relevant skills, and licenses, and be able to produce this list at the request of the relevant officials. These records shall be filed in the OHS file.

Employees are responsible for their own health, safety, and that of their co-workers in their respective areas of work on the project.

Employees must be made aware of their responsibilities during induction and awareness sessions some of which are:

* + - 1. Familiarising themselves with their workplaces and health and safety procedures.
      2. Working in a manner that does not endanger them or cause harm to Others.
      3. Keeping their work area tidy.
      4. Reporting all incidents/accidents and near misses.
      5. Protecting fellow workers from injury.
      6. Reporting unsafe acts and unsafe conditions.
      7. Reporting any situation that may become dangerous.
      8. Carrying out lawful orders and obeying health and safety rules.
      9. Declaring to the employer if taking medication, which may have intoxicating effects.
      10. If an employee has a reasonable belief that the work to be undertaken is likely to endanger him/her or any other person/s due to sub-standard acts or conditions, inadequate precautions or a lack of protective equipment or clothing, he/she has the right to refuse to work and shall report such situation to the *Employer*.
      11. An employee does have the right not to work in any area or perform any task where that employee has reasonable justification to believe that the work situation presents a danger to his/her health and safety, organizational assets or the environment.

It must be highlighted to all employees, that anyone who becomes aware of any person disregarding a health & safety notice, instruction or regulation shall immediately report this to the person concerned. If the person persists, stop the person from working and report the matter to the *Project Manager* immediately.

The *Contractor* appointed personnel shall be registered in their respective levels as professionals in terms of the legislative requirements (SACPCMP).

OHS professionals (which include safety officers) are required to register as professionals with the SACPCMP.

#### Construction Professional Registration

The Principal *Contractor* and all his/her appointed Subc*ontractor*s shall be registered in their respective levels as professionals in terms of the requirements of the SACPCMP. SHE professionals (which include Construction Safety Managers and Officers) are required to register as professionals with the SACPCMP. Construction Managers are required to register as professionals with the SACPCMP.

#### SHE Competency and organogram

The *Contractor* is required to compile their company organogram for the contract, highlighting the reporting structure from their senior management down to their project employees. This diagram must be kept up to date, a copy of which must be given to the *Employer* and copy filled in the relevant project SHE files.

The *Contractor* shall appoint a safety practitioner(s)/officer(s) with a minimum of a national diploma in safety management or environmental related courses and be registered with the SACPCMP.

#### Training, Appointments and Competencies

The *Contractor* need to ensure that the resources to work on the project have the required related training, knowledge and experience specific to the scope of work/services.

The scope of the training includes but is not limited to the type of work being performed and the relevant procedures. In addition to the requirements, the *Contractor* employees would require the appropriate qualifications, certificates and tickets, and be under competent supervision. Records of all training and qualifications of all *Contractor* employees must be kept. The *Contractor* shall maintain comprehensive records of all employees under his control (including all employees of the *Sub-Contractor*) attending induction training. Acknowledgement of receiving and understanding the induction must be signed by all persons receiving the induction respectively.

The *Contractor* must ensure that the training providers are accredited and registered with SETA according to the relevant unit standards. The *Contractor* must have proof of this on site for verification.

The *Contractor* must develop a training matrix for all their employees.

The *Contractor* shall ensure that all their appointees are made aware of their accountabilities and responsibilities in terms of their appointment, and advice and assist these appointees in the execution of their duties.

The Principal *Contractor* shall ensure that competent persons are appointed in writing in accordance with the applicable appointments.

Copies of all the appointments shall be kept in the SHE File

#### Health and safety (SHE) file

The *Contractor* shall compile a SHE (health and safety) file as per *Employer’s* safety file requirements. The *Contractor* shall also ensure that the health and safety file; which shall include all documentation required in terms of the provisions of act and these regulations; is opened and kept on site and made available to an inspector and/or the *Employer* upon request.

The *Contractor* at the end of the project shall submit health and safety file to the *Employer*.

#### Health and safety management plan

The *Contractor* shall provide and demonstrate to the Employer a suitable and sufficiently documented health and safety plan, based on the *Employer’s* health and safety specification contemplated in regulation 5(1)(b) provided by the client.

The *Contractor* must use the applicable OHS information to develop a suitable and sufficient OHS plan, submitted with the tender documents, which will indicate to the *Employer* the level of compliance to the OHS requirements. The occupational health and safety plan shall identify each activity to be undertaken by the *Contractor*, the foreseeable internal and external hazards, the specific precautions, and controls that shall be necessary to ensure that the *works* proceeds safely and without risks to health or adjacent operations.

Upon discussions with the *Contractor*, a final accepted OHS plan would be signed and approved. The plan shall demonstrate *the Contractors* management commitment to OHS.

The safety plan shall be reviewed to ensure that it fully addresses all the issues and complies with the requirements of the OHS specifications and contract. If necessary, the *Contractor* shall amend the OHS plan as required by the *Employer*.

**Note:** When there is an amendment to the Acts and/or to the Regulations, the SHE plans must be reviewed, updated accordingly and changes must be communicated to all relevant employees.

#### Hazard identification and Risk assessment

It is a legal requirement in terms of Section 8 (2)(d) of the OHS Act for an employer to continuously carry out risk assessments, to establish which risks and hazards are attached to the health and safety of persons due to any work which is performed, any article or substance which is, handled, stored, transported.

The *Contractor* shall prepare and provide to the *Employer* a baseline risk assessment as well as activity-based risk assessment for an intended work.

#### Provision for Cost of Health and Safety measures

The *Contractor* shall ensure that there is provision for the cost of occupational health and safety measures.

Note: the costing for OHS must be detailed, that is itemised based on the overall scope of the project (i.e., medical surveillance (Medicals), training, provision of PPE, COVID-19 compliance, safety equipment purchases, resources, occupational health programmes and occupational hygiene surveys etc).

#### Medical programs

The *Contractor* shall ensure that the employees are registered on a medical surveillance programme and are in possession of a valid medical fitness certificate, completed in South Africa. The certificate of fitness should be relevant to the type of work (risk based) that the employee will be exposed to. This will require each employee to have a risk-based person job specification that will be used as a basis for medical examination.

The *Contractor* must ensure that his employees have undergone pre-entry medical examination before starting work on site. No employee will access site without a valid medical fitness certificate. Periodic medical examination shall be done for all employees as work progresses. Upon completion or as and when employees’ leave the project, an exit medical examination must be done for all employees involved in the project.

#### Emergency Care

The *Contractor* shall develop emergency procedure in line with the Employers emergency protocols. *Contractor* shall further ensure that emergency response service is always available to attend to any emergency cases that may arise during the duration of the contract.

The *Contractor* shall be responsible to familiarise himself with local municipal disaster management portfolios.

A list of emergency numbers must be displayed at notice boards and public areas for ease of access to all employees and visitors. The *Contractor* shall ensure that his employees are familiar with the emergency numbers. Emergency numbers will also be part of the OHS induction.

*Contractor* shall have one first aid box for the first five (5) persons and thereafter one for every fifty (50) or team of workers on site or part thereof. There should be a trained and appointed person to render first aid service when required. The first aider(s) shall be in possession of a first aid level two (2) training as minimum requirement as per *Employers* emergency planning procedure 32-123.

More first aid boxes shall be provided if the risks, distance between work teams or workplace requirements require it (it should be available and accessible for the treatment of injured persons at that workplace).

Minimum contents of a first aid box: (Refer to GSR 3 Annexure of the OHS Act).

A prominent notice or sign shall be erected in a conspicuous place at a workplace (SANS1186 approved signs to indicate location of first aid boxes), indicating where the first aid box or boxes are kept as well as the name and contact details of the first aider of such first aid box or boxes.

The *Contractor* shall ensure that alternative arrangements shall be made for possible incidents occurring after normal working hours.

#### Personal Protective Equipment (PPE)

In terms of Section 8 of the OHS Act, the duty of the employer is to take steps to eliminate or mitigate (hierarchy of control measures) any hazard or potential hazard to the safety or health of employees before resorting to PPE.

*Contractor’s* employees on site, including visitors, shall use SANS always approved risk-based PPE, as a minimum:

* + - 1. Head protection hard hat (with chin straps).
      2. Steel toe capped safety boots.
      3. Eye protection. Wearing of impact Safety Spectacles with side shields. Prescription glasses must comply with the same standard or cover impact safety spectacles must be worn over them.
      4. Long sleeved and long pants protective clothing.
      5. High visibility vests.
      6. Dust mask and/or cloth masks.
      7. Refer to General Safety Regulation 2 of the OHS Act.

The *Contractor* shall ensure that his employees understand why the personal protective equipment is necessary and that they use them correctly. Training should be provided to employees on the use, care, replacement, and limitation of the provided PPE. Records of training to be kept and made available to the *Employer* or inspector upon request.

Strict non-compliance measures must be administered to any employee not complying with the use of PPE and that employee shall be removed from the Site.

Note: Certain areas will be subjected to specific/extra PPE requirement.

#### Health Pandemics and Disaster Management

The *Contractor* shall ensure proper management and control of any disaster and or pandemics that may come forth during the contract.

#### BBSO Behavioural Based Safety Observation (BBSO)

*Contractor* shall incorporate BBSO or VFL programmes within their health and safety management system.

The objective of behavioural safety observations is to assess and address the actual safe and unsafe behaviours of people in the workplace; as well as workplace conditions - which are caused by the actions or non-actions of employees, *Contractor*, or their personnel.

#### Employees’ Right of refusal to work in an unsafe situation

Employees have a duty to take reasonable care of their own as well as other person’s health and safety at work and to cooperate with the *Employer*, carry out lawful orders, including reporting unsafe situations and incidents.

Refer to *Employers* procedure 240-43848327- Employees’ right of refusal to work in an unsafe situation. The aim of the procedure is to ensure that an environment is created that promotes zero harm by empowering employees and *Contractors* to take responsibility for their own safety and that of Others.

#### OHS Audits

During this contract, the *Contractor* shall be subjected to scheduled or monthly audits by the client to monitor compliance.

The *Employer* reserves the right to monitor and conduct unannounced audits to ensure compliance and provide assurance to the *Employer’s* representatives and their key stakeholders.

#### Incident management

The *Contractor* shall report and investigate all incidents/accidents as required in terms of the legislation.

All incidents reporting, recording, classification and investigation will be done according to the requirements set out in the *Employer’s* document 32-95 (latest revision).

#### OHS Performance Status Reports

The *Contractor* shall provide OHS statistical and non-statistical reports, dashboards, presentations on weekly and monthly basis.

#### Meetings

The *Contractor* shall attend the monthly safety meeting scheduled by the *Employer.* Ad-hoc meetings shall be scheduled to address any health and safety related issue.

#### Work Co-ordination/interface Process

Work coordination process is designed for monitoring and coordination of activities for contractors working within the same area. It allows work to proceed without risk to the health and safety of contractor personnel, visitors, principal contractors, and client personnel.

The following shall be taken into consideration:

* + - 1. Whenever there is more than one contractor working in one area there shall be a documented interface process.
      2. Where there are agreements between different contractors, those agreements shall be written and signed off by the client and site/plant owner.
      3. It is crucial that there is link between the risk assessment required for the permit to work in terms of PSR and the task risk assessment, as these risk assessments identifies critical controls required to execute the work.

#### Transportation of Passengers

It is a legal requirement to provide safe transportation of Employer’s 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 that comply with the Road transport Act, may transport passengers;
* Proof must be submitted on request in terms of valid roadworthiness of the vehicle/s;

**Note:** The above must apply to on site and off site transportation of passengers.

#### Housekeeping

The *Contractor* shall maintain a high standard of housekeeping within the site. Prompt disposal of waste materials, scrap and rubbish is essential.

The *Employer* requires the *Contractor* to conduct housekeeping daily and perform housekeeping inspections (at least weekly) to ensure maintenance of satisfactory standards. The *Contractor* shall document the results of each inspection and shall maintain records for viewing.

Housekeeping must be done before and after every shift. After completion of every task, the *Contractor* must conduct a proper housekeeping and keep evidence of housekeeping in that area.

**Note:** Nails protruding through timber shall be bent over or removed so as not to cause injury.

In cases where an inadequate standard of housekeeping has developed, compromising the health, safety and cleanliness, all employees have the responsibility to bring it to the attention of the *Employer*. The *Employer* will have the authority to instruct the suspension of relevant works until the area has been tidied up and made safe. Neither additional cost nor extension of time to the Contract shall be allowed because of work stoppage.

Emphasis on housekeeping and general safeguarding on construction site CR 27 and stacking and storage on construction site CR 28 is mandatory and must be always complied with.

#### Inspection Colour Codes

The below table should be used for colour coding on site for monthly and quarterly inspections on tools and equipment. Material to be used on colour coding should be cable ties. The colour coding should be implemented as soon as on the first day of the respective month. Previous month colour coding should be removed and replaced with new ones for the present month. Wrong colour coding on tools and equipment shall be deemed as proof that inspection was not conducted for the month on that item. Colour coding does not replace the need of daily inspection checklist being conducted daily and kept in the file on site.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Monthly Inspection Colour lode** | | | **Quarterly Inspection Colour Code** | |
| January | Blue | Blue | January | Green |
| February | White | February |
| March | Black | March |
| April | Grey | Grey | April | Red |
| May | White | May |
| June | Black | June |
| July | Pink | Pink | July | Blue |
| August | White | August |
| September | Black | September |
| October | Brown | Brown | October | Yellow |
| November | White | November |
| December | Black | December |

#### Work Stoppage

The temporary stoppage of an activity/activities or task(s) may be because of SHE concerns, including the following circumstances which shall not warrant any financial compensation:

* + - 1. Ad hoc safety intervention by *Employers* management: All work of a similar nature may be stopped as the result of an occurrence of a serious incident. The *Contractor* shall be required to comply with, and/or verify, the conditions stipulated in the work stoppage instruction pack.
      2. Ad hoc safety intervention by any person, especially SHE functionaries, may be due to unsafe work or unsafe behaviour by the *Contractor*. The conditions that gave rise to the work stoppage will determine the corrective measures to be taken urgently to protect the health and safety of employees and protect the environment and plant or equipment, etc.

**NOTE:** Work stoppages that are initiated because SHE related incidents shall not warrant any financial compensation claim lodged against the *Employer.*

Further note the *Employer* do have two (2) compulsory work stoppages per annum. Safety discussions will be held on those days and no financial compensation claim lodged against the *Employer*. This is in line to support the *Employers* safety culture of Zero Harm.

#### Hours of Work

All work conducted on site shall fall within the legal requirements in accordance with the Basic Conditions of Employment Act.

The *Contractor* will notify the *Employer* of any work that needs to be performed after hours according to the agreed arrangements. (The application needs to be submitted timeously). Where applicable, the notification should include proof of application, for overtime, to the Department of Employment and Labour and/or the letter of approval from the Department of Employment and Labour.

#### Project Close-out

On completion of the project or service rendered, the *Contractor* shall close out their project documentation and OHS files and handover to the *Project Manager.* All required documentation shall be submitted and handed over to the *Employer* using relevant medium as per the procedure (Project Closeout and H&S documentation, 348-9942695). A checklist shall accompany the submission to verify that all documents are submitted/or handed in to the *Employer.*

#### Environmental constraints and management

The *Contractor* shall comply with the environmental criteria and constraints stated in Annexure

The *Contractor* to ensure:

* that all requirements of the EMP [28], 200- 162027 Record of Decision [Water Use Licence, [22], Medupi EMS Scope and Manual 200-73971 [23], and all legal requirements/permits are compiled to where applicable

1. that construction EMP [28], and relevant method statements (e.g. Site establishment, water, dust, SPCC, stockpile and biodiversity management) are submitted to the Environmental Department for approval prior commencement of construction activities.
2. All potential environmental risks are identified, and mitigation measures are identified and implemented.
3. That incidents are prevented where possible and corrective actions are speedily actioned for the ECO to approve where applicable.
4. monthly reports are submitted to the Environmental Department which must include among others the following:
   1. All incidents,
   2. PCARS,
   3. All activities on site
   4. Aspects and Impacts register
   5. Waste records, and
   6. Awareness records The *Contractor* shall comply with the environmental criteria and constraints stated in Environmental procedure.
      1. Ensuring adherence to the environmental specifications;
      2. Ensuring that Method Statements are submitted to the ECO for approval before any work is undertaken. Any lack of adherence to this will be considered as non- compliance to the specifications.
      3. Ensuring that any instructions issued by the *Engineer,* on the advice of the ECO, are adhered to.
      4. Ensuring that there must be communication tabled in the form of a report at each site meeting, which will document all incidents that have occurred during the period before the site meeting;
      5. Ensuring that a register is kept at the site office, which lists all the transgressions issued by the ECO;
      6. Ensuring that a register of all public complaints is maintained.
      7. Ensure that all employees, including those of sub-contractors receive training before the commencement of construction in order that they can constructively contribute towards the successful implementation of the environmental requirements of the Contract.
      8. The most important actions by the Contractor to ensure compliance with the environmental requirements, relates to the establishment of an adequate and appropriate organizational structure for ensuring the implementation and monitoring of the requisite environmental controls.
      9. Compile an Environmental monitoring plan outlining all the construction activities, associated environmental impacts and how they will be mitigated;
      10. Appoint an environmental officer for the project and provide the site environmental profile;
      11. Ensure that the project pricing makes provision for environmental costs.
      12. Contractor shall attach a company waste management plan including the typical waste inventory and templates used for keeping waste records.
      13. *Contractor* shall attach Environmental Management system documentation that is aligned to ISO 14001
      14. Include environmental considerations as an item on the agenda of the monthly site meetings
      15. Compile and implement the necessary Method Statements; and
      16. Undertake environmental awareness training of all site staff during the commencement of each Contract, with regular refreshers for the duration of the Contract.

Ensure that the environmental authorizations required in terms of National Environmental Management Act, 1998 (section 24) are sought prior to storage of dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of:

* + 1. More than 30m3 (30 000L) but less than 1000m3 (1ML) at any one location or site, GNR 386 (7)
    2. More than 1000m3 (1 000 000 L or 1ML) at any one location or site, including the storage of one or more dangerous goods in a tank farm, GNR 387 {1(c)}.

#### .1 Spillage of Hazardous Chemical Substances

* + 1. Any spillages that occur shall be treated in accordance with the requirements indicated on the MSDS
    2. Identify appropriate storage areas for stockpiling of materials, storage of hydrocarbons and storage of hazardous substances and ensure that these areas are appropriately prepared for their purpose;
    3. Disposal of hazardous substances shall be done in terms of the relevant legal requirements;
    4. Limit spillage of hazardous substances or substances with the potential to cause contamination of the environment;
    5. Develop emergency protocols for dealing with spillages particularly where these pose a pollution risk or involve hazardous substances;
    6. Compile and implement the necessary Method Statements ; and undertake environmental awareness training of all staff;

**Herbicide usage**

* + 1. Only registered pest control operators may apply herbicides on a commercial basis. All staff applying herbicides shall be trained in the application thereof and shall be provided with suitable PPE.
    2. The application of herbicides shall be in accordance with the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act No. 36 of 1947. Only approved and tested herbicides with a low environmental risk shall be used.

aa) An herbicide register for usage shall be compiled and maintained, and a copy handed to the project leader / environmental advisor on completion of the project / contract.

**Fire hazard**

bb) The *Contractor* shall develop emergency protocols for dealing with fires, which may include a Fire Management Plan in accordance with the National Veld and Forest Fire Act (No 101 of 1998) and ensure that all staff is educated in fire prevention and will be held responsible to avoid the risk of fire. No area is to be denuded of vegetation to create firebreaks, to prevent or make fires. No open fires are allowed on site. The contractor shall ensure that operations are in compliance with statutory requirements at all times. The *Contractor* Environmental Officer shall ensure that in areas with a high fire danger rating, staff are made aware thereof. Smoking shall be restricted to designated areas or shall not be allowed, particularly in areas that have a high fire danger rating.

cc) *Contractor* shall ensure that adequate Fire Fighting equipment is available on site, particularly near hot work.

**Waste**

dd) All waste generated shall be disposed of at a registered landfill site. A register of both hazardous and general waste shall be kept. A waste management plan shall be compiled before commencement of work. Records of waste disposal shall be kept and updated all the time. No waste, be it biodegradable or not, shall be left on site once work has ended.

ee) Domestic and hazardous waste generated shall not be burned, buried, or disposed of on Eskom or Landowner property, but will be controlled and removed to a registered waste site on a regular basis (Daily / Weekly). The Principal *Contractor* and contractor working on site shall ensure that oil, fuel, and chemicals are confined to specific and secure areas throughout the construction period. These materials shall be stored in a bunded area with adequate containment for potential spills and leaks.

ff) *Contractor* must ensure that all waste are disposed to a registered landfill site. Where the Municipality does not have a weighbridge, the *Contractor* is responsible for obtaining a formal notification to this effect.

gg) *Contractors* shall ensure that sufficient waste bins / containers, with lids are made available for waste control. The *Contractor* shall comply with the requirements of NEM: Waste Act 59 of 2008.

hh) Quantities of disposed waste shall be recorded and reported on a monthly basis. Set up system for regular waste removal to an approved facility and minimize waste by sorting wastes into recyclable and non-recyclable wastes;

**Equipment maintenance and storage:**

ii) Ensure that all plant is in good working order;

jj) Undertake maintenance within specified area (workshop); and use drip trays for all stationary or parked plant and when servicing equipment away from designated areas

**Material requirement**

kk) The use of any material or property belonging to any landowner shall not be permitted prior to arrangements with the relevant landowner. Written proof of such agreement shall be handed to project leader / co-coordinator for record keeping

**Dust and Noise**

ll) The *Contractor* shall monitor dust and noise caused by mobile equipment, generators and other equipment during construction. Factors such as wind can often affect the intensity to which these impacts are experienced.

mm) To ensure that noise does not constitute a disturbance during construction activities, all construction works shall occur between specific working hours. This shall be stipulated in the contract.

nn) Mitigation measures to be implemented as required / agreed upon with the project leader / environmental advisor.

oo) Dust suppression measures shall be in place to reduce the dust caused by the movement of heavy vehicles and other *Contractor* activities.

**Environmental Incidents**

**Water**

pp) All environmental incidents such as pollution (air, water, land, noise, etc.), bird kills, and animals killed, plants destroyed, public complaints etc. shall be reported to project leader and / or environmental advisor within 24 hours of its occurrence.

qq) All environmental incidents occurring on site shall be recorded according to Eskom Procedure 32-95, detailing how each incident was dealt with. Proof thereof must be kept in an incident register.

rr) The *Contractor* shall be held liable for any infringement of statutory requirements of the Environmental relevant legislation.

ss) No construction shall be allowed within the 1:100 year flood lines. Should any pollution of the watercourse occur, the Department of Water a and Sanitation must be notified immediately.

tt) Water usage on site shall be verified with the substations/power stations responsible person, the project leader / environmental advisor to ensure compliance with legislation. Borehole water shall be verified as suitable for human consumption. All incidents related to water contamination shall be reported within 24 hours. Records of water quantities abstracted should be kept.

uu) Chemical toilets shall not be within close proximity of the drainage lines / ways.

vv) All construction works must comply to project environmental authorization and water use licenses.

**Signing off of the contract**

ww) No project shall be signed off before Business Unit or Department has given assurance that no environmental liabilities exist. The responsible person, project leader or environmental advisor shall carry out a physical inspection before acceptance of work done.

xx) No invoice shall be processed before work done is accepted.

xx) The *Contractor* shall be conversant and in the course of carrying out the Works

.The *Contractor* shall comply with the provisions of all Acts, regulations, ordinances, by-laws, Standards, Codes, Rules and requirements of public, municipal and other authorities.

#### Quality assurance requirements

The Supplier shall demonstrate, provide and maintain a Quality Management System (QMS) that is ISO 9001:2015 certified or compliant thereto. Compliance with the provisions of this clause in no way relieves the Supplier of the final responsibility to furnish acceptable services.

The Supplier agrees to control and professionally preserve and store appropriate documents, records and recordings for a period of 5 years after termination of the agreement to guarantee the traceability of the services rendered and inspection thereof.

The Supplier agrees to regularly update and implement all the latest technology available as well as the necessary improvements for the installation, production and organisation deemed necessary to meet the requirements of the agreement and in order to enhance capabilities and effectiveness to deliver high quality, cost- effective security services.

The delivered or services shall be uniform in Quality and condition, consistent with good industry practices and adhere to requested Eskom requirements, without deviation.

The *Employer* shall have the right to regularly conduct inspections, assessments , audits and surveys and perform surveillance of the Supplier’s and/or Sub-Supplier facilities, sites, premises, records and documentation ( including but not limited to data books ) to evaluate their capability to comply with the requirements necessary to conform to contractual and QMS requirements.

The *Employer* reserves the right to inspect, at reasonable times, any or all of the services performed at the Supplier’s or Sub-Supplier’s premises or elsewhere.

Verification by Eskom shall not absolve the Supplier of the responsibility to provide acceptable product and / or services, nor shall it preclude subsequent rejection by Eskom.

The services must comply with the agreed specifications and requirements and the applicable directives and standards set out in the Contract. Defects notified by the *Employer* shall be remedied by the Supplier upon demand by the *Employer* without undue delay and at no extra cost. The Supplier shall continuously monitor and identify non-conformances, both internal and external, as signals of opportunities for improvement making process and other relevant changes to prevent recurrence.

The Supplier shall further identify potential problems before they occur by identifying deviations in patterns or trends in product, service or process performance.

Nothing contained in the Contract and/or purchase order and/or scope of work and

/or works information shall relieve in any way the Supplier from the obligation of Quality control thereof.

The Supplier guarantees that the Quality of the delivered services will comply with the requirements of the contract and/or relevant specifications.

The Supplier shall, on request, prove its ability to relate to the proposed scope of work which establishes the manner in which the Supplier intends to perform the Contract.

The Supplier shall, on request, prove its organisational, logistics and support resources to ensure the requirements of the contract can and will be achieved.

The *Employer* reserves the right to assess and measure, during the existence of the agreement the qualifications, capability and competence of the key staff (assigned personnel) in relation to the scope of work and to interview any / all of them to confirm the Quality evaluation.

The identified professional personnel who will be managing the service will be available and accessible on a continuous basis until the conclusion of the project. The Supplier shall demonstrate experience in comparable projects or specific aspects of the project and / or performance in similar projects, on request.

The Quality of the services and the contents thereof will always be in accordance with professional standards.

For the duration of the Contract, the professional staff managing the service, must be and remain a member of his/her Professional Society

The Supplier must, at all relevant times, scrutinise and be aware of Eskom’s requirements with specific focus on , inter alia, its philosophy, principles, strategies, practises, mission, vision, models, policies and practises.

The Supplier shall exercise reasonable professional skill, care and diligence in the performance of his obligations in terms of this agreement.

On awarding of the Contract to the successful Supplier, such Supplier shall present to the *Employer* an acceptable Quality Control Plan (QCP). The QCP shall comply with the requirements of ISO 10005

The *Contractor* shall employ sufficient qualified and knowledgeable quality assurance and Quality control and inspection staff. These staff members shall be independent from those Responsible for construction and commissioning activities and report directly to the Site Quality Department Manager and not the production team as referenced on Medupi Quality Specification (200-1689 sub-clause 3.4.1).

* + 1. ***Contractors* QMS that includes:**

1. Ensuring that processes, plans and procedures needed for the QMS are established and maintained and the integrity of the QMS is maintained when changes are implemented.
2. Ensuring that Quality Assurance and Quality Control Depts. are sufficiently manned with competent resources to effectively implement quality requirements.
3. Reporting to top management on the performance of the quality management system and any need for improvement.
4. Ensuring the awareness of customer requirements throughout *Contractor*s organization.

Quality management shall ensure that the *Employer's* requirements as specified in the Contract are met in full and verified as such to *Employer* satisfaction. Quality management shall be in accordance with ISO 9001:2015 and related ISO 9000 series of Standards, 240-105658000 Supplier Quality Management Specification (QM 58) and is to provide full documentary and Objective evidence that the Works have been designed, manufactured, executed, completed and maintained in accordance with the Contract.

The quality management system shall apply to the *Contractor* and all persons real or juristic working for or on behalf of the *Contractor* on or in connection with the Works and regardless of the form of employment contract.

Quality management shall ensure that the Quality Control Plans, Inspection and Test Plans and procedures/instructions/method statements/ECNs/FCNs developed or adopted provide stages at

which the *Employer* may witness what is being done or require what is being done to be subject to inspection before the execution continues

*Contractor* shall list all documentation needed for the effective implementation of the project quality management system (QMS) and shall, as a minimum, prepare, maintain and implement throughout the life cycle of the project, as part of the project quality management system. The project specific documentation are as follows:

1. Project Quality Policy
2. Project Quality Strategy
3. Project Quality Objectives
4. Project Quality Management Plan
5. Project Organisation Chart.
6. Project RACI Matrix – may be split by Dept. /Phase/Discipline as required.
7. Job Descriptions including performance requirements and measurements.
8. Equipment and Process Criticality Ratings,
9. Project Quality Assurance Plans – per project phase:
   1. Design
   2. Manufacturing, Inspection and Testing
   3. Construction, Inspection and Testing
   4. Commissioning and Taking-Over
10. Project Quality Control Procedures - per discipline:
    1. Civil and Structural works.
    2. Mechanical, Piping, Painting and Insulation works.
    3. Electrical works.
    4. Control and Instrumentation works.

Project Quality Control Procedures per individual activity identifying specific inspection and test methods and acceptance criteria.

Project Inspection and Test Plans (ITP’s) per individual activity that plan, assure quality, and define inspection intervention levels.

Project Quality Verification Records per individual activity - as referenced in ITP’s. Manufacturing, Construction and Commissioning Record Books

Except where otherwise stated, all documents that constitute the Quality Management System, including proforma Quality Verification Records, shall be complete, in accordance with the Contract, and ready for use and submitted to Engineer not less than 30 days before the work governed by the documents are planned to start.

Throughout the lifecycle of the project, on a monthly bases, the *Contractor* shall maintain and submit a

MDL (Master Documentation List), to the *Project Manager* for review and approval. Each document on the Master Document List shall have the following marked against it:

1. The planned and actual date of submittal to the *Project Manager*
2. The classification of documentation (for approval, for review, or for reference) based upon the classification guidelines of Quality specification document.
   1. Class 1 - for the Engineer’s approval - where the *Contractor* may not proceed with the Works that are the subject of the document until it has been approved by the Engineer.
   2. Class 2 - for the *Project Manager*’s Review - where the *Contractor* may proceed with the works that are the subject of the documentation if the *Project Manager*’s has made no comment after seven (7) days from the receipt by the *Project Manager*
   3. Class 3 - for the Engineer’s Reference - where the *Project Manager* reserves the right to comment, but the *Contractor* may proceed with the works that are the subject of the documentation.

Where there is an ambiguity or where a document is produced that is not referenced therein clarification as to classification shall be sought from the *Project Manager*.

The Master Document List shall be submitted to the *Project Manager* electronically via email in native file format on a monthly basis.

The *Contractor* submits as a minimum the following documents, as required by the *Employer*, which requirement does not constitute a compensation event, during the execution of the Works:

-

* + - Updated QCP register
    - Inspection notifications accompanied by their inspection report
    - Non-conformance and Defects registers and reports
    - Updated Site and off-site inspection schedules.
    - Inspection and or FAT dates.
    - Inspections completed/outstanding.
    - Inspection and test reports
    - Monthly contract quality progress report
    - Data books for the completed Works, before commissioning can commence (refer to the Record books section 2.5.2 and data books hand over time lines).

#### Record Books

The *Contractor* to develop, document via procedure for *Project Manager’s* approval and thereafter implement a system for collation or quality verification records, including change management records into Manufacturing, Construction and Commissioning Record Books.

1. *Contractor* to review data book progressively during 30%, 70% and 100% of the completed work and provide valid comments in the form of comment sheet per each stage of review to the *Employer* prior *Employer*’s review.
2. No data book shall be reviewed by the *Employer* without *Contractor* s reviewed evidence and comment sheet Indicating first review second review with addressed comments and final review.
3. The *Contractor* to develop Data book Register and maintain for the duration of the project Said Procedure shall define format, content and structure of Record books and process of compilation and handover and shall, as a minimum, conform to the following:

a. Record Books shall be provided by the *Contractor* for;

1. Manufacturing - Prepared for each individual “Purchase Order refer to 240-109836134 clause 3, Scope of work and *Employer* requirements”. Only manufacturing records per discipline e.g. Civil, Structural steel, Mechanical, Electrical, C&I works etc.
2. Construction/Erection - Prepared for Each Discipline as in bullet 1, each geographical area for civil works and for systems/sub- systems for mechanical and electrical systems including C&I separately: Commissioning - prepared for each commissioned system.

Note: Record books shall be not combined on Data Dossier. Manufacturing, Construction/Erection and Commissioning shall be separated.

1. The *Contractor* need not include documents and drawings etc. that have been approved by the *Project Manager* which are included in SPO and shall instead provide and include an index of such documents in the Record Books on the basis that the originals are in SPO and traceable via the “Index”.
2. Record Book shall be written in English or provided with an English translation
3. The index of all Record Books shall be submitted to the *Project Manager* for approval.
4. As the work progresses, *Contractor* shall compile Record Books progressively with the original material certificates, installation, erection, testing, inspection and change management documents and shall verify continued and accurate updating via weekly review and spot checking against inspection performed that week.
5. *Contractor* shall report the status of Record Book compilation progress at Weekly Progress / Quality

Meetings together with the Data book Register.

* Record Books shall be endorsed by stamp, date and signature of the *Contractor* and the

*Employer* signifying completion and accuracy when complete.

* Each Record Book shall have cover sheet (With a Sleeve pocket to insert a cover sheet) of A4 size paper and a spine label on which is printed the following:
  1. Title of Document, *Contractor’s* company logo, Unique number/SPO, Name of Project

*Contractors’* Job Code, *Contractor* Document number, Eskom Document Number, System KKS number, System Description, Document type “Manufacturing or Construction or commissioning”,

*Contractor’s* number, Name of *Contractor*, Volume Numbering (1 of …. or 1/10) xv. Address of

*Contractor,* Column for signature by *Contractor* Representative and *Employer’s* representative

* 1. All Manufacturing Record books shall be Completed, Approved and handed over to the *Employer* not later than (7) Seven days after Delivery Inspection on site Prior Installation/Construction Phase.
  2. All Construction Record books shall be Completed, Approved Safety Cleared and handed over to the *Employer* not later than (7) Seven days after Final inspection (AFI) Prior Commissioning Phase
  3. For other civil / Earthwork, All Construction Record books shall be Complete, Approved and handed over to the *Employer* prior taking over section of works.
  4. All Commissioning Record books, Operating, maintenance and training manuals shall be Completed, Approved and handed over to Eskom not later than (7) Seven days after the last test prior taking over of completed works (TOC)
  5. Construction Record Book shall be compiled in A4 size with 4-post binders in loose-leaf form with numbered pages such as, Page 1 of 10 or 1/10 whichever sequential counting method that clearly identifies page numbering.
  6. Summary table of each volume’s contents shall appear in all volumes. Volumes are to be numbered e.g. 1 of 3, 2 of 3, 3 of 3 etc. both on spine and front cover.
  7. The binders are to be robust and not subject to distortion by impact during shipping. The binders shall not be over filled and contain only a suitable number of documents to enable convenient handling.
  8. Contents shall be sectionalized and separated by properly labelled dividers
  9. Contents shall be placed in the relevant sections and sections shall be separated by properly labelled section dividers/separator sheets easy referencing with going through the content.
  10. All section dividers/separator sheets shall be made of card and shall bear the Section Identifier - 1, 2.

1. The contents of each section, e.g. Section 1, Section 2, etc., of the Record Book shall be placed directly behind the relevant section dividers/separator sheets and each document shall be clearly marked with the following:
   * Relevant section letter, Page number - every document shall receive a page number, in each section the page numbers shall run consecutively.
     + Record Books shall contain as a minimum:
   * All material Reports and Certificates, All Inspection Reports, All Test Reports, All Release Notes, All Change Management Reports, All drawings or an index of drawings identifying drawing No. and revision status, All Defect Reports, All Procedures or an Index of Procedures, All Inspection and Test Plans if used as a Quality Verification Record or an Index of Inspection and Test Plans if used as an assurance and control document, All Drawings or an Index of Drawings.

#### Statutory Records

The *Contractor* shall submit a statutory compliance file containing minimum documents as follows:

* + - 1. Electrical Equipment
* Statutory register and COCs
  + - 1. Civil Structure

Statutory register, Professional Engineering Certificates, Glazing Certificates, Sewer Certificates

(Subjected to exemption)

* + - 1. Pressurised Equipment

Statutory register, Certificate of Conformance for PER equipment, Inspection and Hydraulic

Pressure Test Certificate for PER equipment and Pre-commissioning Certificates.

1. Lifting Equipment

Statutory register – lifting equipment, statutory register – passenger conveyance lifts, Load test certificates for all lifting equipment’s and Transformer Impact Recording,

Functional safety clearances for all equipment, Operating procedures and Maintenance Procedures.

1. Permanent KKS certificates (no temporary labels to be allowed at take-over)
2. Software and applications to interrogate the equipment, i.e. power electronics, All the configuration files and settings implemented, FAT, SAT and SIT Reports, CEMS, Dust and gaseous emission correlation tests to be completed.
3. Boiler Registration certificate

#### Handing over of Record books/Data Books by *Contractor*

QA Completeness review

After addressing all comments given to the *Contractor* during QC 100% review of data books by the *Employer,*

The *Contractor* shall request QA via *Project Manager* to perform completeness review of the record books

The *Employer* Quality Assurance team will also make reference to the data book checklist (200-616427) for compliance of format and lay out of the Record Book / Data Book.

#### Programming constraints

The *Employer* provides the Key Dates as set out in clause 11.2.9 of the Contract Data of the *Employer*, the access dates in clause 30.1 of the Contract Data by the *Employer*; the interface points identified by the *Contractor* in the *Contractor’s* Works Information and requirements set out in the Works Information.

The *Contractor* submits as part of its tender response a Level 3 programme which becomes the first Accepted Programme that contains the following as a minimum:

* The Key Dates
* The access dates from clause 30.1 of the Contract Data by the *Employer*;
* The detail on how the *Contractor* intends to achieve the Key Dates and the access dates;
* Interface with Others;
* Interface with the *Employer;*
* The date of Site establishment;
* Show all the critical paths;
* The *Contractor* must ensure that his programme contains sufficient float in order for the

*Contractor* to add interface and alignment with the *Employer’s* requirements and,

* Other factors, information, methodologies, detail and dates which the *Contractor* believes are necessary for achievement of the interface with others; Key Dates, Completion Dates and access dates.

The *Contractor* submits a revised programme during the *Contract* in accordance with time period provided in clause 32.2. This revised programme must contain the following:

1. All information required as [stated above];
2. the services and work (programs) of all his Sub*contractor*s and suppliers;
3. the design schedule where applicable;
4. the construction schedule;
5. the planning schedule;
6. the construction and manufacturing schedule;

The *Contractor* submits an updated programme every 2 weeks during execution. The updated programme is not a revised programme submitted in terms of clause 32 of the Contract. Notwithstanding anything to the contrary in the contract, Works Information or expressed at any meeting or in any minute of a meeting, the Accepted Programme is not altered by the *Employer*’s involvement in discussing the updated programme. All references to the requirements for a revised programme will be inferred as references to the requirements for an updated programme. The *Contractor* must ensure that the Key Dates and interfaces with the *Employer* and *Other*s are incorporated into the Accepted Programme. To improve integration and interfaces with the Others and the *Employer*, the *Contractor* participates in the integration meetings with the *Employer* and *Other*s as required by the *Employer*. The information obtained from these integration meetings are incorporated into the revised programmes submitted to the *Project Manager*. The *Contractor*

ensures that all dates, including Key Dates, between the *Contractor*, the *Employer* and Others are aligned in the revised programme

Where project execution date periods fall during or after public holidays or the annual builders’ holidays, festive season, Easter or any Other public holiday recognised by the Public Holidays Act number 36 of 1994,

The *Contractor* plans his schedule, work force and resources to ensure the Key Dates and Completion Date is met.

#### Computerised Planning Requirements

Programmes shall be in Primavera P6 format and shall be submitted weekly in electronic format (XER) together with two printed copies. Where not possible, MS Projects will also be acceptable.

Unless otherwise directed in writing by the *Employer*, the level of detail required is level 4 and programmes shall;

* Include Work Break-down Structure (WBS) as provided;
* Show activity quantities and units;
* Show activity durations;
* Show late and early start dates, late and early finish dates and total float;
* Include activities codes (which activity codes shall be consistent with those provided by the *Employer* from time to time);
* Clearly identify and indicate milestones, key events and the critical path;
* Activity ID’s will not change;
* Any addition or deletion of activities to be clearly reported on with reasons;
* All activities shall be resource loaded and shall be aligned with the costing report,
* Schedule to be in such detail to be used in the 3D model,
* Activities exceeding thirty (30) days in duration shall be broken down into detailed sub-tasks.
* Commissioning activities shall be scaled in days.
* *Contractor* activities shall be fully detailed to show clearly all times of delivery to the site of construction, First Programme

The first programme shall be consistent with the programme submitted with the Tender but shall include any alterations or additions negotiated and agreed to between the Parties as at the Contract Date.

If, under [Programme] of the Conditions of Contract, the *Contractor* is required to submit a first programme within 14 days after the Contract Date,

Together with the first programme, the *Contractor* shall submit a cash flow diagram (S- Curve) directly produced from the programme detailing the estimated financial expenditure over the Contract period based appropriate quantitative information.

The *Employer* will have a Master Programme which incorporates the *Contractor’s* and Other programmes. The *Contractor* submits updated electronic progress reports as required by the *Project Manager* which requirement is not a compensation event. The updated progress report shows the logic and all filters and layouts used in the programme.

#### Planning Methodology and Programme Levels

All planning is done based on the Critical Path Method (CPM). The *Contractor’s* planning methodology incorporates the compatibility, alignment and interface with others on the Project. This is clearly visible to the *Employer*. The Accepted Programme shows the actual critical path clearly. Unless the critical path is affected the *Contractor* does not get a change to the Completion Date [or increase to the Prices].

The Accepted Programme and progress reports layout takes into account the approved WBS, reflecting the manner the works are to be performed and how control data are to be summarised, reported and monitored.

The *Contractor’s* Accepted Programme and progress reports include sufficient detail and input to allow for dynamic integrated project control allowing the *Employer* to achieve the requirements of the Project.

#### Time Reporting

The *Contractor* extracts and provides a one-month “look ahead window” from the Accepted Programme, showing activities per tank. It furthermore shows Key Dates and the activities of the *Employer* and others which are scheduled for Completion within the next reporting period in a case where there are interfaces.

#### Reporting on Remaining Duration

The method for reporting on activities in progress is by remaining duration, i.e. the time, in working days, needed to complete the activity from the report date. Once an activity has started, the remaining duration is assessed for each update. Automatic reduction of remaining duration as the report date moves forward is not accepted

#### Actual Dates

When completion of any activity is confirmed by quoting document numbers, these numbers are given in remarks and are appended, e.g. suborders, drawings, inspection certificates, delivery notes, etc. The actual starting, and completion date of all activities is reported.

#### Progress Reporting during Provision of the Works

The *Contractor* submits its progress reports on the last day of each month and if the last day is not a working day, the preceding working day or more often as required by the *Project Manager*. This requirement does not constitute a compensation event.

The *Contractor* submits, together with the progress reports, a written report containing the following:

Statement and report on work where delay against the Accepted Programme has occurred (if any), together with the reasons why delay has occurred and a plan denoting the action to be taken and the period of time necessary to recover such delay; any impact that the delay may have on Others or an indication of Others affected by the delay. Statement and report on those Works that are currently ahead of programme, any impact on the progress of others or an indication of others affected by the delay. The impact of any programming changes arising is reflected in revised forecast rate of payment schedules and resource schedules.

#### Progress Report

The *Employer*; the *Contractor* and *Other*s meet daily to report the overall progress of erection activities which identifies the following:

* any SHE related incidents and remedial actions or plans;
* progress of previous day’s work
* resources;
* any deliveries of Plant, Material and Equipment’
* the scheduled date of delivery of Plant, Material and Equipment’
* interface, alignment and compatibility with the *Employer* and Others;
* *Contractor’s* current activities progress and planned finish dates
* *Contractor’s* planned start and finish dates for work
* Planned effort for activities
* Actual effort for activities
* Remaining duration for activities
* Percentage progress for activities

#### Weekly Progress Report

The *Contractor* submits weekly progress reports to the *Project Manager*. This report is used as a tool for the day-to-day management of the Contract. Contents of a weekly report include the following items:

* + Programme summary narrative.
  + Progress and performance summaries.
  + Schedule rolling horizon.
  + Completion and Key Date status.

#### Monthly Progress Report

The *Contractor* submits to the *Project Manager* a written monthly report as provided for in paragraph 2.6.6 above. The report contains the following information as a minimum requirement:

* + Executive summary (narrative identifying major movement within the reporting period).
  + Revised Programme indicating, actual progress of work against last Accepted Programme.
  + A one-month look ahead work window.
  + Activities completed during current reporting period per discipline, including the activities of the *Employer* and Others.
  + Activities in progress during current reporting period per discipline, including the activities of the *Employer* and Others.
  + Activities undertaken during next reporting period per discipline, including the activities of the *Employer* and Others.
  + Status overview by unit, by plant area, by phase.
  + Key issues / Items of concern and corrective actions.
  + Progress curves and tabular progress reports.
  + Cost and Cash flow.
  + Cost curve 'S-curve'.
  + Early warning log.
  + Compensation event log.
  + General planning report (computer generated).
  + Critical activities report.
  + Key event report (computer generated).
  + Report selecting all of the activities of the *Employer* and Others - (computer generated).
  + Updated bar charts.
  + Updated resource schedule and histogram (If changed).
  + Updated activity schedule
  + Forecast rate of payment schedule updated with actual progress.
  + Statement and report on Works ahead and behind progress;
  + Skills development progress report (if applicable).

#### Planner Requirements

The *Contractor’s* planner is experienced, qualified and must be dedicated to the Contract to perform the planning and programming requirements in accordance with this section. During execution, the *Contractor* must provide a full-time planner at the Site.

#### Commissioning Plan

To the extend the *Contractor* is responsible for the design of the Works under the Contract, the *Contractor* shall prepare and submit to the *Employer* for his approval a detailed commissioning plan for such Works, which commissioning plan shall;

* + comply with the *Employer*’s Requirements and other applicable requirements of the Contract (the *Contractor* acknowledging that his commissioning plan will need to be integrated by the *Employer* into a detailed commissioning plan for the related Project Works, which will include the works of Other Project *Contractor*s);
  + be amended and re-submitted at the expense of the *Contractor* until approved by the

*Employer*; and

* + be amended, updated and re-submitted for the approval of the *Employer* as necessary and when required by the *Employer*.

Compliance with the commissioning plan shall not relieve the *Contractor* of any responsibility, undertaking warranty or other obligation under the Contract.

Unless the *Employer* directs otherwise, the detailed commissioning plan shall be submitted at least twelve months prior the scheduled start date of commissioning and a preliminary commissioning plan shall be submitted within 56 days after Commencement Date.

#### Monthly Progress Reports

The *Contractor* shall submit monthly progress reports to the *Employer*. The reports shall be submitted in writing in a form approved by the *Employer*. The comparison of actual and planned progress referred to in clause 2.5 below shall, however, also be submitted in electronic XER format. An electronic copy and two hard copies of each progress report shall be submitted to the *Employer*.

Each report shall cover a period of a calendar month save that the first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted by the 4th (fourth) day of the month following the month to which the report relates.

Each report shall include:

* an executive summary;
* charts and detailed descriptions of the status of the Works in narrative format, including each stage of design, *Contractor’s* Documents, procurement, manufacture, deliver to the Project Site, *Contractor*, erection commissioning and testing;
* for the manufacture of each main item of Plant, the name of the manufacturer, manufacturers location, percentage progress and the actual or expected dates of

commencement of manufacture, inspections, pre-delivery tests and delivery to the Project Site;

* one month and three month look-ahead schedule;
* comparisons of actual and planned as against the programme, detailing activities completed, the percentage progress of each activity in progress completed and not completed and activities not started;
* colour photographs in digital format showing progress in the course of manufacture and on the Site, with each set comprising at least 20 colour photographs, individually marked with the date taken, a description of the subject and the direction of view;
* updated cash flow S-curve and S-curve on forecast and progress;
* details of actual and planned resources including number of each class of *Contractor’s*

Equipment at the Project site for the relevant period

* a report of quality demonstrating compliance with the quality assurance requirements of the Contract, including a schedule identifying all quality control documents, test results and certificates issued during the reporting period;
* a list of proposed Variations and the status thereof;
* a list of Variations detailing their reference numbers;
* a list of site instructions and other instructions received by the *Contractor* (other than Variations provided for in 2.11) listing the date of receipt and the nature of the instruction;
* a list of notified claims for extensions of time or compensation detailing their reference numbers, the date on which the underlying cause, circumstances of event arose and it first came to attention of the *Contractor*, the claimed additional Cost (and reasonable profit where applicable) and/or extension to the Time of completion, the dates on which notice and the details thereof were given to the *Employer* under Core Clause 6

, Disputes Resolution under Option W1of the Conditions of Contract and status thereof; a risk registers and assessment dealing with all areas of concern including detail of all notified early warnings and detail of other events and circumstances not dealt with above, which may have an impact and/or cause delays and details of the corrective or other measures being adopted, r to be adopted mitigate or overcome such cost impact and/or delay;

* a current register of drawings and other documents submitted to the *Employer* during the reporting period and the prior reporting period, detailing the date of issue to the *Employer* and, if applicable, the date by which the *Employer*’s approval is required;
* a current list of all drawings and document issued to the *Contractor* (including the applicable revisions) detailing the date of issue and transmittal thereof;
* a report on health & safety and environmental matters demonstrating compliance with the health & safety requirements of the Contract;
* a report on industrial relations relevant to the works including relations at the Project Site and at places of manufacture;
* status report on payments made and outstanding applications for payment;
* a copy of the *Contractor’s* daily Project Site diary (c.f 4 below) for the period in question; and
* Such other matter and information (including schedules and charts) as the *Employer*

may require t be included in the Progress Report from time to time.

* Free Float shall not be used, but Total Float,
* Progress Override shall not be used, but Retained Logic,
* Total Float shall be calculated as “Finish Float = Late Finish – Early Finish”

#### Additional Weekly and Daily Report

Following mobilisation at the Project Site, the *Contractor’s* office shall, in addition submit to the

*Employer* (in electronic copy and two hard copies):

* weekly reports which shall summarise Project Site activities, including numbers of each class of *Contractor’s* Personnel and of each type of the *Contractor’s* Equipment on the Project Site, the plant and Materials on the Project Site and record any areas of concerns and details of corrective action being taken; and
* daily activity reports summarizing the main activities to be undertaken each day, noting any special activities that require witnessing, together with full particulars and details of obstructions, modified or additional work, incidents, health and safety matters and he number of men employed in each several positions of the work in progress.

#### Daily Project Site Diary

The *Contractor* shall maintain an up to date daily diary of all Works related activities at the Project Site. The daily diary shall always be available for inspections by the *Employer*.

#### Report of Disputed Works

For work in respect of which the entitlement of the *Contractor* is disputed or of an uncertain nature, the *Employer* may require the *Contractor* to submit work detail sheets, for the approval of the *Employer*, as a record of work done. The sheets shall be” For record purposes only” and shall not give rise to the evidence and entitlement to an extension to the Time to Completion of any addition compensation.

#### Additional Reports

The *Employer* shall be entitled to request the *Contractor* to provide additional reports when in his option they are warranted to monitor the progress of the work.

#### Meetings

During the execution of the Works, various weekly and monthly meetings shall be held.

*Inter alia,* these meetings are to be discussed and review in detail the up-to-date progress of the Works, without limiting the nature of the matters to be discussed at these meeting.

If the actual progress of the work is at any time unsatisfactory, the *Employer* shall be entitled to call on *Contractor* to advice for the reasons for the foregoing and to make proposals for corrective action to be taken.

The *Employer* shall be entitled to call meetings required by the applicable Law or otherwise required by the *Employer* in connection with the Project Works. These meetings shall be conducted at the Project Site or at another location directed by the *Employer*. The agenda for the meeting shall be determined by the *Employer*. The *Contractor* shall be entitled to propose matters for inclusion on the agenda of any meeting which he is required to attend. The minutes shall be kept by the *Employer* and submitted to the *Contractor* for comments prior to the subsequent meeting and such minutes shall thereafter be formally approved at such subsequent meeting as an accurate record of the issues discussed at the previous meeting, such minutes shall not necessarily be a verbatim transcript of the discussions at meetings.

Unless otherwise approved by the *Employer*, meetings were the *Employer* requires the *Contractor* to be present, whether scheduled or otherwise called by the *Employer*, shall be attended by the *Contractor’s* Representative.

The *Employer* will furthermore conduct ‘pull plan’ sessions with the *Contractor* in order to determine any gaps in the schedules and to coordinate the works in a more structured way. The outcome of these ‘pull

plans’ will be discussed with the *Employer*s representative and the *Contractor* schedule will be adjusted accordingly before the next submission to the *Employer*.

#### Photographs for Progress Reporting Requirements

The taking of photographs of the Medupi Power Station including the Project Works is restricted and subjected to the approval of the *Employer* as provided for under the Contract.

For the purpose of the Progress Reporting Requirements, the *Employer* shall be entitled, at any time to prohibit the taking of such photographs and/or require that all such photographs been taken by an officially *Employer* appointed photographer or where not possible, by the *Employer*

supervisors. In the latter events, the *Contractor* shall be required to make arrangements directly with this photographer for the taking of the photographs required by the *Contractor* for the purpose of the Progress Reporting Requirements and for the payment thereof.

* 1. ***Contractor’s* management, supervision and key people**

Proof of qualifications to be submitted to the *Project Manager* for approval and acceptance for the

*Contractor* and Subcontractor’s key people, including appropriate registrations.

The *Contractor* to submit an operational plan, including organogram for approval and acceptance by the Project *Manager*.

Below are the key persons referred to in clause 24 of the Contract, The *Contractor* should on his organogram include the below listed key persons.

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

* Dedicated *Project Manager*
* Dedicated Project Planner
* Dedicated Site Manager
* Dedicated Quality Manager
* Dedicated Quality Control Supervisors
* Dedicated Site Safety Manager and Safety Officers
* Dedicated Site Safety Representatives
* Dedicated Engineer
* Dedicated Technical Field Advisors / Specialist
* Dedicated Commissioning Engineers
* ECSA registered engineer\technologist responsible for civil design and certification (PEC)
* Site engineering representative(s) for ECSA registered civil Designer

For the purposes of this Contract, “dedicated” means that the person is allocated only to this Contract, full time, must not be working on any Other contract, must be available at Site as and when required, must be available at Site full time during the construction phase, must respond promptly to instructions.

In the *Contractor’s* tender response, the *Contractor* states how many of the key people are required for this Contract. The *Contractor’s* pricing for this provision of this activity must be stated

in such a way that the *Employer* is able to assess the number of dedicated persons, their job function and the extent of their availability. If the *Employer* finds that the key people are not a “dedicated” resource, the *Employer* makes a pro rata deduction from the Prices.

#### Invoicing and payment

At each *assessment interval*, the *Contractor* submits to the *Employer* a forecast rate of invoicing that includes all the expected payments by the *Employer* to the *Contractor* on a month-by-month basis.

The invoice needs to have all supporting documentation attached to the invoice, rental sheets per

*Contractor’s* equipment registers, any other relevant information and signed off by both parties.

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.

The *Contractor* shall address the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

|  |
| --- |
| Eskom Holdings SOC Limited  Medupi Power Station |
| P. Bag 7502 |
| ONVERWACHT |
| 0557 |

And include on each invoice the following information:

Name and address of the *Contractor* and the *Project Manager;*

The contract number and title;

*Contractor’s* VAT registration number;

The *Employer*’s VAT registration number 4740101508;

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

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

#### i. General

1. Invoice addressed to Eskom Holdings Limited
2. Read “Tax Invoice”
3. Company VAT registration number
4. Eskom VAT registration Number 474010508
5. Invoice Number
6. 45 Purchase Order Number
7. 50 Goods Receipt Number
8. Supplier Name and Address
9. Vat to be indicated separately
10. Order Numbers to be invoiced separately
11. Rate/Activity to be claimed in accordance with contract
12. CPA invoice need to be invoiced separately
13. Local and foreign invoices to be invoiced separately
14. Invoice to be delivered not later than last day of month of assessment
15. Invoice date to be same month (not later than last date) of assessment
16. Incorrect claim (invoices) should be cancelled with a credit note referring to the incorrect invoice and issue a new invoice
17. Any interest payable
18. Settlement discount

#### 2.8.2 Foreign Portion Invoicing:

1. Info of foreign beneficiary and foreign Bank account
2. Foreign Beneficiary Invoice (foreign Amount) to be attached to local invoice (Also to comply to General requirements)
3. Bank Details and IBN No to appear on invoice
4. Rand amount claimed in accordance with contract
5. Foreign currency converted at contract rate
6. Amount claimed and Rand Amount to appear on invoice
7. Import and services to be claimed on separate invoices
8. VAT to be claimed separately referring to foreign invoice
9. Services to be paid direct overseas and may not be paid into a CFC Account
10. Foreign CPA calculations together with index need to be attached

#### Import Invoices

1. Import documentation to be attached
2. Custom invoice to reflect foreign currency and amount
3. Bill of entry
4. SARS customs release notification document
5. Custom Worksheet Bill of lading or Airway Bill

#### Note: Prior to tax invoice generated:

* 1. The *Contractor* submits a claim to the *Employer* for assessment
  2. The *Employer* prepares the assessment which must be accepted by the

*Contractor*

* 1. The *Employer* create Good Receipt Number which should be reflected on the payment certificates and the tax invoice
  2. Payment to be accepted by the *Contractor*
  3. **Insurance provided by the *Employer***

As stated for in the *Employer`s* Construction All Risk Insurance Policy available on request from Eskom Group Insurance.

To be dealt with in accordance with ECC3 Core Clause 87.1, 87.2 and 87.3 and additional requirements are also stipulated in Z Clauses

The insurance policies and procedures will form part of the Contract Data and any reference to this will be contained in the Contract Data.

#### Contract change management

Changes during a term of the Contract are inevitable and when they occur they need to be managed within the policies and procedures of the *Employer*. Changes can be minor which are administrative or substantial which may affect the price and delivery. There are two ways to change a contract:

1. Bilateral
2. Unilateral

Bilateral is when both Parties (*Contractor* and *Employer*) agree that a change is necessary. The second one is the unilateral whereby the *Employer* may exercise a right to modify the contract without the *Contractor’s* consent. In case of latter one, the Eskom procurement and supply chain management procedure 32-1034 must be followed.

#### Contract changes and contract Scope

*Employer’s* commercial policy requires a competitive process, any change upon the type of goods or services needed must be consistent with what was asked during the tender stage. A contract change needs to be within the scope of what was provided during tender stage. A significant difference will not be allowed because it had not been subjected to fair competition. Transparency is one of PPPFA requirements and as a government owned organisation had to comply with.

#### Administrative changes

These are the changes that are within the scope of contract and do not affect the originally signed contract. These changes are typically executed via a unilateral amendment. Examples include:

* + - 1. Changes in address
      2. Correction of typographical errors not affecting the substance of the contract
      3. Changes as permitted by the language of the contract
      4. Changes in personnel assigned to the contract (exclusion of Key People, these are dealt with as per the contract).

#### Substantive changes

These are the changes that affect both Parties. They require bilateral amendments. These changes may require one of the Parties to be compensated for such changes as stated in the contract clause 60.1

#### General Principles of contract change management

Engineering change will be dealt with as per 3.3.1. if either party is in doubt about whether a change fall within the definition of engineering change then it will be processed as a contract change.

Under this contract change management:

Either party may request a contract change. All changes need to be formally communicated prior to the implementation of that change.

1. Neither party makes a request that is not made in good faith or for good reasons
2. The *Project Manager* assesses and documents the potential impact of a proposed contract change before presenting it to Medupi Compensation Events Committee
3. The *Project Manager* has the right to request reasonable amendments to a contract change request.
4. The *Project Manager* has the right to reject a change and specify his reasons.
5. No proposed contract change will be implemented by the *Contractor* without prior approval of the *Project Manager*.
6. the proposed change is of emergency in nature, approval of emergency instructions will be followed as per paragraph 2.10.7,
7. Any contract changes necessary to comply with a Change in Law will be implemented as set out in paragraph 2.10.3 & 2.10.4.

Until a change is approved, signed and issued to the *Contractor*, then

* 1. Unless the *Project Manager* expressly agrees otherwise in writing, the *Contractor* continues to provide the *works* in accordance with the signed contract as if the proposed contract change does not apply; and
  2. Any discussions, negotiations or other communications which may take place between the *Project Manager* and *Contractor* in connection with any proposed contract change, including submission of any change communications, is without prejudice to each party’s other rights under this Contract.

1. The *Project Manager* notifies in writing the *Contractor* stating the reasons why the *Contractor* has not reasonably demonstrated the need or justification for the contract change in connection with the specified event. If the *Contractor* disputes the notice, then the matter is resolved in a risk reduction meeting.
2. Where the *Contractor* does not approve a contract change in respect of a specified event, the *Contractor* notifies his decision within period of reply.

#### Costs

1. Each party bears its own costs in relation to the preparation and agreement of each change request and impact assessment.
2. All contract changes are calculated in accordance with the principles set out in Price Schedule. Any cost savings resulting from the contract change will be passed on to the *Project Manager* by way of reduction in the charges.2.10.6 Contract Change Request.
3. Either party may issue a contract change request to the other party at any time during the term of the contract. The change request is substantially in the form of Appendix 10 and must state a relevant clause and specify if it is categorised as an emergency change.
4. If the *Contractor* provides a contract change request, he also needs to provide an impact assessment in terms of cost, schedule, and quality.

#### Impact Assessment

1. Each impact assessment includes (without limitation):
   * Details of the proposed contract change where the contract change is proposed by the

*Contractor* including the reason for the contract change and

* + Details of the impact of the proposed contract change on the contract and the *Contractor’s* ability to meet its other obligations under this contract, including without limitation changes to:

1. The Works Information
2. Accepted Programme
3. Other *Works* provided by Others to the *Employer* including any changes required by the proposed contract change to the *Project Manager*.
4. Interface
   * Details of the estimated cost of implementing the proposed contract change
   * A schedule for the implementation, together with any proposals for the testing of the contract change
   * Where applicable details of how the proposed contract change will ensure compliance with any applicable Change in Law and
   * Such other information as the Project Manager may reasonably request in (or in response to) the change request.
5. The *Project Manager* reviews the Impact Assessment and responds within the period of reply or as agreed with the *Contractor*.
6. If the *Project Manager* requires further information regarding the proposed contract change so that it may properly evaluate the change request and impact assessment, then with the period of reply or as agreed with the *Contractor*, the *Project Manager* notifies the *Contractor* of this fact and details the further information that is required. The *Contractor*

provides the relevant Impact assessment within the period of reply or as agreed with the *Project Manager* of such notification. The parties may repeat the process described in this paragraph until the *Project Manager* is satisfied that it has enough information to properly evaluate the change request and impact assessment.

1. ***Project Manager’s* right of acceptance of contract changes**

Within period of reply of receiving the impact assessment from the *Contractor*, or further information, the *Project Manager* evaluates the change request and the impact assessment in good faith and

1. Submits all the details of the event to the Secretariat of Medupi Compensation Events Committee (CEC) which meets on weekly basis.
2. Presents the details of the event to Medupi CEC
3. Implements the recommendations of the CEC.
4. Notifies the *Contractor* of the rejection of the proposed change. If the Project Manager rejects a proposed change, then he may explain his reasons in writing to the *Contractor* within period of reply or as agreed with the *Contractor.*
5. Require further details on the change request and/or impact assessment in which the *Contractor* makes changes and respond within period of reply or as agreed with the *Project Manager* of such request.
6. If the proposed contract change is recommended by the Compensation Events Committee, the *Project Manager* notifies the *Contractor* in writing. The *Project Manager* signs off on all deviation to the contract (drawings, specifications and other relevant documents) before the implementation of such deviations may take place
7. ***Contractor’s* right of acceptance of proposed changes**

The *Contractor* has a right to reject a proposed change if he believes any proposed contract change which is requested by the *Project Manager*:

1. Would materially and adversely affect the risks to the health and safety of any person
2. Would require the works to be performed in a way that infringes any Law.
3. Is technically impossible to implement provided that
4. The *Contractor* can demonstrate to the *Project Manager* that the proposed contract change is impossible to implement
5. Neither the Accepted Programme nor the Works Information state that the *Contractor* has technical capacity and flexibility required to implement the proposed change.
6. Would materially and adversely affect the *Contractor’s* ability to deliver the works.
7. Would not be possible to implement before contract completion date.
8. Would cause the *Contractor* to breach any of the Insurances
9. Would cause the *Contractor* to be in breach of any existing licence, consent or permit
10. Would require the consent of Others to enable the contract change to be implemented and the *Contractor* is unable to obtain the consent of the Others.
11. Would result in additional cost to the *Contractor* that is not proposed to be paid to the

*Contractor* as part of change

#### Emergency Instruction contract ch*anges*

1. The emergency instruction contract change may cover technical, financial, safety and strategic aspects.
2. The only person who can instruct the *Contractor* to implement such changes is the *Project Manager*. Such instructions need to be subsequently followed by a written formal communication. All changes must be documented, and no payment will be made to undocumented change.
3. The *Project Manager* is given restricted authority to cover instructions to the *Contractor* that are of an emergency in nature and which will result in a contract change. Such contract changes are presented to the Compensation Events Committee, by the *Project Manager*, for its retrospective recommendation and ratification by the *Employer*.

#### Authorisation of Contract Change

Any proposed contract changes are not authorised, and the *Contractor* does not implement any proposed contract change until the signed letter and other signed documents (e.g. drawings, specifications) are sent to the *Contractor*.

#### Communications

* 1. For any contract change communication to be valid, it must be sent to the *Contractor*

as applicable.

1. All *Contract* change communications may be hand delivered or sent by first class post or facsimile. Contract change common e time of delivery or, if delivered after 16.00 hours on the next Working Day
2. If posted first class within South Africa at 10h00 on the second Working Day after it put into the post.
3. If sent by facsimile, then at the expiration of four (4) hours after the time of despatch, if despatched before 15h00 on the next Working Day, and in any other case at 10h00 on the next Working Day following the date of despatch.
   1. In proving delivery of a contract change communication, it will be sufficient to prove that the delivery was made, or that the envelope containing the contract change communication was properly addressed and posted (by prepaid first class recorded delivery post) or that the facsimile was properly addressed and despatched, as the case may be.

The *Contractor* submits the following for compensation event assessment:

* + - Quotation indicating Current market rate if not included in the short schedule of cost components
    - Labour time sheets
    - Early warning to the *Project Manager*
    - *Project Manager* ‘s Instruction
    - Percentage fee applied
    - CPA Calculation where short schedule of cost components rates were utilised
    - Signed Record of decisions (ROD) or design change request form for Engineering design changes
    - Revised program where key date and completion date is affected
    - Revised program where instructed to accelerate by the *Project Manager*
    - Invoice from supplier and service providers

#### ii. 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.

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

The *Contractor* submits the following for compensation event assessment:

1. Quotation indicating Current market rate if not included in the short schedule of cost components
2. Labour time sheets
3. Early warning to the *Project Manager*
4. *Project Manager ‘s* Instruction
5. Percentage fee applied
6. CPA Calculation where short schedule of cost components rates were utilised
7. Signed Record of decisions (ROD) or design change request form for Engineering design changes
8. Revised program where key date and completion date is affected
9. Revised program where instructed to accelerate by the *Project Manager*
10. Invoice from supplier and service providers

#### Training workshops and technology transfer

The *Contractor* provides training for each unit on the Plant regarding Operating, Maintenance and Engineering aspects of the equipment they provided to the *Employer.* The *Contractor* provides training material and a training course for operating, maintenance and engineering personnel where it is applicable and required. For more detailed requirements on the training required refer to Section 5.2.7 of this *Works* Information

1. **Engineering and the *Contractor’s* design**

Contractor’s Designer shall (not limited to):

* + The *Contractor* shall use the Employers Design in the form of construction drawings as a basis/departure for their detailed design. The detailed design was completed by original consultant around 2014 and as such the *Contractor* shall make provision for review and/or modification and/or adopt (as applicable) to the extent necessary to assume professional design liability for the existing designs. Any changes to the *Employers* design must be motivated to The *Employer.* Design liability shall be with the Contractor (design consultant).
  + The *Contractor* is responsible for progression the existing design information presented in the “*Employer’s* Design Drawings” section of this document into a fully integrated detailed design. The existing designs interface with existing infrastructure and operation and as such the *Contractor* shall consider as far as reasonably practicable the prevailing site constraints and conditions.
  + The *Contractor’s* design consultant shall be liable, fully accountable and assume the role of designer as defined in Construction Regulations for the design and the constructability of the design submitted to the Employer.
  + Provide design assurance and design verification on existing designs and make the necessary amendments.
  + Attend meetings with the Employer’s Engineering team
  + Provide construction monitoring services of the works including but not limited to the points below:
  + Carry out sufficient inspections at appropriate times of the construction work in order to ensure compliance with their design, to ensure design assumptions are valid and that work being executed in accordance with appropriate construction techniques.
  + Assist the Employer with design and construction integration issues pertaining to the scope of works
  + Provide technical assurance during project life cycle including but not limited to review and approval of construction quality assurance and control documentation
  + Final site inspection on completion of the works prior to issuing a completion certificate.
  + Review and acceptance of construction data books
  + Provide as built documentation including but not limited to drawings for various structures
  + Issue Professional Engineering Certificates, by an ECSA registered Engineer or Technologist with relevant experience and qualifications in their specific fields of expertise.
  + The *Contractor* shall adhere to all applicable Normative and Informative documents as per Section 2.2 of this document including other relevant applicable documents.

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* 1. ***Employer’s* design**

#### System Overview

The Medupi Ash Dump Workshop and Ash Dump Substation has experienced inadequate drainage with water ponding near the facility that has compromised access to the workshop. A comparison revels that none of the drainage, road construction or shaping activities specified in 0.84/7252 sheet 12 Rev03 have been implemented and therefore no drainage of this area has been catered for.

PEC 348-9912973 indicates that the Ash Dump Workshop is complete, however, it excludes drawing 0.84/7252 sheet 12 Rev03, a disconnect between the As-builds, PEC and status quo of site conditions.

It is unclear why these activities were never executed and why where are signed off an As-Built on incomplete works. Generation has requested remedial measures be undertaken to correct the ponding water. The images below reflect the location and extent of the flooding during the rainy season.





#### Image 1: Flooding at Ash Dump Workshop

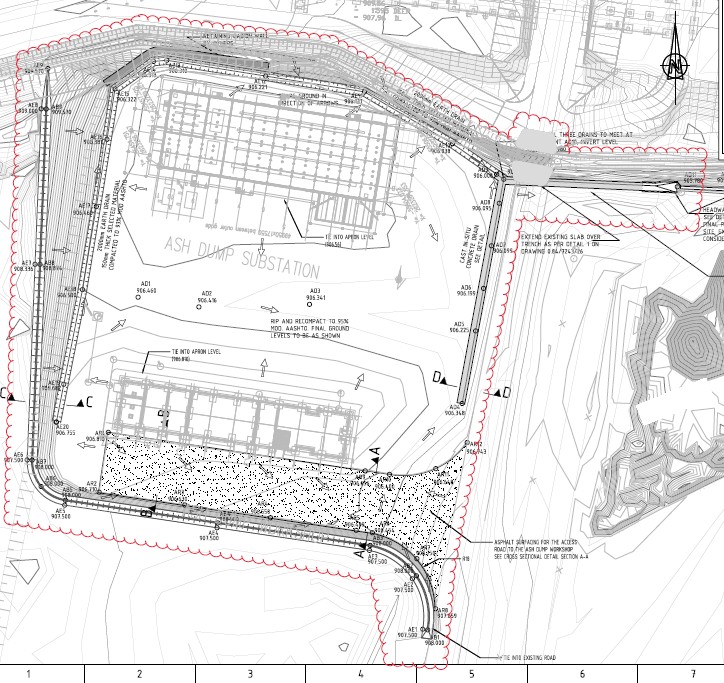


**Figure 2: Inadequate Access Due to Flooding**

#### Boundaries: Ash Dump Workshop/Substation Surrounds

The area of concern around the Ash Dump Workshop and Substation has the following boundaries:

* 1. Access road and Channel to the South of Ash Dump Workshop
  2. Drainage Channel and Shaping to the West of the Ash Dump Workshop and Ash Dump Substation and tie-in to existing road.
  3. Drainage Channel and Shaping to the North of the Ash Dump Substation to tie-in into existing lined channel
  4. All terracing and shaping between the Ash Dump Substation and Ash Dump Workshop to enable drainage storm water drainage.
  5. New channels along the existing road East of the Ash Dump Workshop/Substation



#### Figure 3: Indication of Work Boundaries

The Contractor shall use the Employers Design as a basis/departure for their detailed design. Caveat: It must be noted that the design was completed and issued for construction by original consultant around 2013 (confirm date on drawing) and as such the contractor’s designer shall make provision for review and verification and/or modification and/or adopt (as deemed applicable) to the extent necessary to assume professional design liability for the existing designs. Any changes to the Employers design must be motivated to the Employer. Design liability shall be with the Contractor. An as-built drawing is referenced ‘Medupi Power Station Ash Dump Access Roads and Drainage Layout 0.84/7252 sheet 12’ Rev 03 and represents the

#### departure point for the design. Note: although labelled as an ‘As-Built” this is not the current status on site and was never constructed. Any changes to this must be motivated and accepted by the Employer.

* 1. **Parts of the *works* which the *Contractor* is to design**

1. The *Contractor* is responsible for progression the existing design information presented in the *“Employer’s* Design Drawings” section of this document into a fully integrated detailed design.
2. The *Contractor* shall be liable, fully accountable and assume the role of designer as defined in Construction Regulations for the design and the constructability of the design submitted to the Employer.
3. The *Contractor* shall provide Professional Services as Designer in accordance to, Construction Regulations, Water Use License (WUL 27086983) and Regulation 704 of the National Water Act (Act 36 of 1998) and Occupational Health and Safety Act, 1993 for the construction monitoring on the works in accordance to the provision of normal and additional services as per “Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act 2000”, for construction monitoring of the execution of all the works detailed below.
4. All existing structure used as part of the existing concept design shall be assessed and if required performance compliance testing and certification be carried out to substantiate the structure is fit for purpose and/or modify the structure for intended use.
5. The *Contractor* shall assess the stormwater runoff within the boundaries provided
6. The *Contractor* shall provide a detailed landscaping design based on the assessment of stormwater runoff to ensure stormwater is directed/channelled to clean water drains or disposed of appropriately. This design will take into consideration all existing infrastructure. Upon review and acceptance by the Employer, the Contractor shall construct the approved design. Designs to eliminate all potential causes of flooding to the Ash Dump Workshop and Substation
7. The *Contractor* shall assess the existing terrace and perform compliance testing where needed. The *Contractor* shall inform and perform additional surveys (eg. underground detection survey) to the extent necessary to verify and establish the incomplete area/s of the works that are to be completed and/or modified based on the “Employer’s Design Drawings”. The Contractor shall provide a drawing/s for review and

acceptance by the Employer. Upon acceptance by the Employer, the Contractor shall construct the approved design.

#### Reinforced Concrete Works

* + - 1. Due to the aggressive environment that the reinforced concrete slabs are exposed to, the exposure condition of the concrete is classified as severe in accordance to SANS 10100- 2, hence the quality of concrete works is of paramount importance.
      2. The *Contractor’s* construction methods are to ensure plastic-shrinkage cracks are limited. The inclusion of an optimum percentage of cement extenders (Fly Ash) in the concrete mix will in general, together with well-placed, protected and cured concrete, enhances durability of the concrete. During the concrete mix design approval process the *Contractor’s* Design Engineer, the *Contractor’s* concrete technologist and the *Employer* shall discuss and agree on the optimum percentage of cement extenders that shall be used in the concrete mix.
      3. The *Contractor*s designer is to make reference document 84CIVL053 for the Medupi Concrete project specification.

#### 3.2.3 Materials

The *Contractor* is to provide the necessary resources, equipment and materials required for the Works specified.

#### Material and Concrete Testing

The *Contactor* to fully comply with the testing stipulated in document number 84CIVL053 [2]. Where any concrete and concrete material testing frequency is unclear, the *Contractor* and *Employer*s Engineering team to discuss and agree on a frequency. All test results to be submitted to the *Employer*’s Team for review.

Due to the importance of the concrete works the *Contractor* may perform durability index tests on concrete works identified as potential defects which may have an impact on the durability of the concrete works. These tests are developed to assess the transport properties of the concrete cover zone. Three durability tests are defined as:

* + - 1. Oxygen Permeability Index test
      2. Chloride Conductivity test and
      3. Water Sorptivity test

Table 3.4.1.1 below provides classification for different test results for the three tests. The acceptance criteria for test results for the three different tests shall be classified as “Good” or “Excellent”. The *Contractor* to ensure the works are scheduled taking into consideration time for defects resolutions.

#### Table 3.4.1.1

|  |  |  |  |
| --- | --- | --- | --- |
|  | Oxygen Permeability | Sorptivity | Chloride Conductivity |
| Excellent | > 10 | < 6.0 | < 0.75 |
| Good | 9.5 – 10 | 6 - 10 | 0.75 - 1.5 |
| Poor | 9.0 - 9.5 | 10 - 15 | 1.5 - 2.5 |
| Very Poor | < 9.0 | > 15 | > 2.5 |

* 1. **Procedure for submission and acceptance of *Contractor’s* design**

All drawings are to be submitted in portable document format and native file format.

The *Contractor* is expected to submit an organogram with relevant experience and qualifications of the execution team. In addition to the above, project cost and schedule estimates need to be submitted to the *Project Manager* for his acceptance. The *Contractor* shall submit procedures, method statement, Inspections and Test Plan prior commencement of works where design work is required.

#### Engineering Changes

Engineering change is any change to an established baseline related to the plant system, such as its configuration documentation, design requirements, technical operating documentation, operating margins and set points, replacement of alternative components with equivalents.

Any change on the Contract must be recorded and correct procedure must be used to implement the change on the project.

#### Engineering Change Procedure

The *Contractor* takes note of the *Employer*’s Engineering Change Procedure (240-53114026). The Engineering change procedure applies to the *Employer*’s personnel or *Contractor*s performing engineering or engineering related work where the quality of the engineering work performed is the direct responsibility of Eskom.

#### Design Change Procedure

The *Contractor* is the Design Authority as defined in the Design Review Procedure (240- 53113685). The *Contractor* is responsible for following this design procedure and conducts all the design reviews as specified in this procedure.The *Contractor* is responsible for conducting the following design reviews where applicable:

1. Design Freeze Review
2. Integrated Design Review
3. Construction Completion Review
4. Acceptance Testing Review

#### Procedure for Submission of Change Documents

The *Contractor* must complete the engineering/design change [report/request] within [5 days] or such other time period that the *Project Manager* and *Contractor* agree is reasonable in the circumstances, of the *Project Manager*’s instruction changing the Works Information.

In completing the engineering change report, the *Contractor*:

1. Takes into account the impact of the *Project Manager’s* instruction on the *Contractor’s*

works, in accordance with the Works Information and the Contract;

1. Provides the *Project Manager* with the impact on the *Contractor’s* detailed design, programme, costs, Completion Date, Key Dates, execution and methodologies;

This information from the *Contractor* will be sent to the Others on the Project in order to integrate the system and ensure that the *Employer*’s objectives in relation to the Project are achieved. Likewise, the *Contractor* may during the *Contract* receive such information, via the *Project Manager*, from Others. The *Contractor* assesses this information to:

1. Assess the impact of this on the *Contractor’s* works, in accordance with the Works Information and the Contract;
2. Provide the *Project Manager* with the impact on the *Contractor’s* detailed design, programme, costs, Completion Date, Key Dates, execution and methodologies;

Within [5 calendar days] or such *Other* time period that the *Project Manager* and *Contractor* agree is reasonable in the circumstances of the *Contractor* submitting (or receiving this information), the *Contractor* attends a meeting with the *Employer* and Others on the Project to align the *Employer*, *Contractor* and Others’ works and ensure compatibility and integration of the Project;

The *Contractor* submits its revised information within [5 calendar days], or such other time period that the *Project Manager* and *Contractor* agree is reasonable in the circumstances, taking into account all information received from the *Employer* and Others.

The *Contractor’s* obligation to submit quotations within the times periods stipulated in clauses

* 1. is not negated by the procedures set out in this paragraph. If, however, the *Contractor’s* quotation does not include the information required by this paragraph or take into account the impact of this information, the *Employer* rejects the quotation in accordance with clause 62.4.

Where the *Contractor* is unable to comply with the Contract or Works Information, he promptly notifies the *Project Manager* of:

* + 1. Details of the non-compliance;
    2. Impact of non-compliance on his and *Others;*
    3. Remedial steps to be taken.

The *Project Manager* meets with the *Contractor* and Others to assess the non-compliance. The *Project Manager* assesses all the information provided to him by the *Contractor* and Others including the impact on Others. The *Project Manager* issues an instruction to the *Contractor* and Others on how to deal with the non-compliance. The *Contractor* bears the liability for effect of the Instruction including his remedial work and the work undertaken by the *Employer* and Others to deal with the non-compliance.

For all instances where the *Contractor* is required to submit a quotation, he must provide the information listed in paragraph 2.12 in order for the *Project Manager* to assess the Actual Cost. If the *Contractor* fails to provide such information with his quotation, the *Project Manager* rejects this quotation. Notwithstanding the lack of a compliant quotation, the *Project Manager* is entitled to issue an instruction for the *Contractor* to start the work.

If there is any delay under the Contract, the *Contractor* must as part of the quotation show how it intends to mitigate its losses. This includes allocating resources, including key people to Other contracts, limiting accommodation, and travel and catering expenses. The *Contractor* shows that in incurring these expenses he prepared for the possibility of delay and made all reasonable attempts to mitigate his losses prior to incurring these expenses.

**ii. Other requirements of the *Contractor’s* design**

#### General

The *Contractor* is to refer to section 3.2 Construction constraints, section 3.3 adverse weather conditions effecting civil works and section 3.8 Configuration management requirements as defined in document 348-9946335.

The *Contractor* provides all plant, equipment, materials and services and executes all work necessary to fulfil all requirements specified in this Works Information. The *Works* complies with Professional Engineering practices and standards for fossil fuel power plants and is designed for the environmental conditions prevailing at Medupi Power Station.

The *Contractor* liaises with the *Employer* and Other *Contractors* to ensure the successful completion of both contract requirements. This is a site activity and is coordinated by the *Project Manager*.

The contract includes the provision of the following where required:

* + - 1. KKS labels (*Employer* provides the KKS codes)
      2. Contract management including site management and Sub*contractors*
      3. Contract programming
      4. Provision of draftsman (drawing) services
      5. Cost control and progress reporting
      6. Quantity surveying documentation
      7. Quality assurance
      8. Quality control
      9. Acceptance testing and handing over to the *Employer*
      10. Training
      11. Documentation
      12. Maintenance support

#### Other requirements

The *Contractor* is to design, produce required drawings and select plant & material which satisfies the following:

1. The overall plant performance and efficiency specification;
2. The specified reliability; and keep maintenance costs to a minimum;
3. Local and statutory authorities. Each system and sub-system components are to be evaluated for compliance with PER of OHSACT of 1993 and be categorised (where applicable) according to SANS 347.
   1. Space constraints and construction requirements;
   2. The specified and applicable standards confirmed in the specification including all the legal requirements in respect of safety and the prevention of environmental pollution.
4. Facilitation of efficient manufacture, inspection, transportation, installation, maintenance, cleaning and repairs;
5. Safe and satisfactory operation for a life expectancy of the chosen technology;
6. Prevention of undue stresses being produced by expansion and contraction due to temperature change and other local natural and manmade conditions;
7. All material from which the equipment is manufactured from is compatible with the intended duty and service conditions. All equipment is suitable treated and protected from corrosion; and
8. All electrical equipment, forming part of the specified equipment shall be sealed against penetration by hose cleaning operations and be also accessible for repair and maintenance.
9. The *Contractor* shall manage and execute the engineering, quality control, inspections, plant and material selection, preparation of installation drawings, testing, balancing, commissioning and preparation of operating and maintenance manuals. The *Contractor’s* submissions include, but is not limited to the following;
10. Detailed design
11. Plant and material selection;
12. Installation drawings
13. Codification and labelling of the plant
14. Testing, balancing and commissioning Documentation
15. Operating Instruction and Maintenance Manuals
16. Inspection Record Cards/Checklists
17. Quality assurance.
18. *Employer* interfacing information
19. Any applicable certification required by South African regulations.
20. The *Contractor* shall also comply with the requirements of the scope document number 348-9946335 and any other requirements in this document.

#### ii. Power Supply interruptions

The *Contractor* ensures that the supplied equipment is capable of safely shutting down the plant without damage in the event of partial or total loss of electrical power and must be designed to accept a sudden restoration of electric power, without damage and without operator intervention**.**

#### Certificate of Compliance

The *Contractor* ensures that all permanent or temporary installations are subject to statutory requirements as explained in OHS Act and SANS 10142-1 for the wiring of premises which include the issuing of a Certificate of Compliance (COC) before an installation is accepted by the *Project Manager*. A COC must be provided where it is required as well as the installation of all required Works including cables and related equipment).

* 1. **Use of *Contractor’s* design**

Ownership of the design provided by the *Employer* shall be taken by the *Contractor’s* designer.

Clause 22.1 is applicable on *Contractor’s* design and deliverables as stated in the Works Information and scope document number 348-9946335

The *Contractor* submits the *Contractor’s* Design Documents to the *Project Manager* for acceptance at the times and in the manner and format stated in the Works Information Acceptance of *Contractor’s* designs, to be applied as stated in Clause 21 of the Contract.

The *Contractor* grants to the *Employer*, with effect from the starting date, in the case of documents or other matters not yet in existence, with effect from the creation thereof (and notwithstanding the Completion or

termination of this contract), an irrevocable royalty-free non-exclusive licence to use all of the documents provided to Provide the Works (including, but not limited to calculations, computer programmes and other software, drawings, manuals, models and other documents of a technical nature), for any purpose whatsoever, including for the purpose of operating, repairing, maintaining, dismantling, re-assembling and making adjustments to all parts of the Works. The

*Contractor* ensures that each Sub*contractor* executes all and any further documents and takes all and any other actions as may be required in order to give effect to this licence.

#### Design of Equipment

The *Contractor* to provide Works as stated in Clause 23.1 of the Contract

#### Equipment required to be included in the *works*

* + 1. The *Contractor* to provide equipment and the material required for execution of the works.
    2. The *Employer* to provide specification documents such as; drawings, data sheet etc. to assist the *Contractor* in the execution of the works. These documents remain the property of Medupi Power Station.
    3. The *Contractor* to supply all required tools, equipment to their employees in order to perform their tasks.

#### As-built drawings, operating manuals and maintenance schedules

The *Contractor* is responsible for submission of As-built Drawings for the Works.

If required, thedesign report, O&M manual and drawings shall be provided by the *Contractor* Designer to the *Employer*, taking into consideration document 348-9946335 section 3.1.1 “design improvement and/or value engineering”

The *Contractor* shall provide as-built drawing for completed *works.* The *Contractor* provides General Arrangement (GA) diagrams to be accepted by the *Employer*.

#### Configuration Management

The *Contractor* shall prepare a configuration management (CM) plan utilizing ISO 10007 as a reference guide for the scope of work. The CM plan shall include the following:

1. A complete and comprehensive description of the *Contractor’s* document numbering conventions and revision schema;
2. A description of the electronic data management system(s) that the *Contractor* will use for the management of documents and/or configuration items;

the

1. A description of the configuration management activities which will be undertaken by

*Contractor* as well as a rough time-scale thereof;

1. A description of the baselines that will be established and the content of these baselines;
2. The release procedure for product configuration information;
3. The procedure for the control of changes prior to the establishment of baselines as well as after;
4. The method for processing changes, emanating both internally and from sub-suppliers;
5. The method for collecting, recording, processing and maintaining the data necessary for producing configuration status accounting records;
6. The definition of the content and format for all configuration status accounting reports;
7. A list of audits will be conducted to ensure adherence to the CM plan.

#### 3.9.1 Plant Designation System

The *Contractor* shall apply the Kraftwerk-Kennzeichensystem (KKS) codification system to uniquely identify the systems, sub-systems and components constituting the Plant.

The *Contractor* shall apply the following guidelines and standards when codifying plant:

* 1. The application of KKS plant coding (NMP 45-7) – 200-4190
  2. KKS Key Part – Fossil power station (NPSZ 45-45) – 200-18202
  3. Issuing of KKS certificate – 200-94660
  4. VGB – B 106 E Part A– KKS Application Commentaries Part A – General
  5. VGB – B 106 E Part B1 – KKS Application Commentaries Part B1\_ Mechanical Engineering
  6. VGB – B 106 E Part B2 – KKS Application Commentaries Part B2 - Civil Engineering
  7. VGB – B 106 E Part B3 - KKS Application Commentaries Part B3\_Electrical and C&I Engineering
  8. VGB – B 106 E Part B4 - KKS Application Commentaries Part B4 Identification of C&I and Control Tasks

The *Contractor* shall identify all plant indicated or referenced by documentation by the plant’s unique

KKS codes within the documentation itself.

The *Contractor* shall ensure that the codification assigned to plant is consistently maintained throughout the design cycle, e.g. the KKS codes indicated in the O&M manuals are consistent with the KKS codes indicated in the original process and instrumentation diagram.

The *Employer* shall supply the *Contractor* with a system-level plant breakdown structure (PBS) of the existing plant at the Site, as well as a preliminary system-level plant breakdown structure of

the plant within the *Contractor’s* scope at contract initiation. The *Contractor* shall review the PBS to ensure alignment with

the *Contractor’s* design philosophy and shall expand the PBS to the complete system level (Fn level of the KKS hierarchy). The *Contractor* shall provide a complete system-level

PBS with the submission of the process flow diagrams of the plant within the *Contractor’s* scope. The *Contractor* shall codify all equipment, and any components which are required to be codified as per the guidelines and standards referenced in this document. The *Contractor* shall indicate equipment and component codification in drawings and documents indicating or referencing such plant.

The *Contractor* will submit all KKS codes designated by the *Contractor*, with the documents in which they were originally designated, to the *Employer* for review. The *Contractor* will remain responsible for ensuring that the codes designated are unique and meet the requirements established by the various standards applicable to the Project. Where any ambiguities or doubts with regards to KKS codification exist, the *Contractor* will engage the *Employer* for resolution.

#### Plant Labelling

The *Contractor* shall manufacture and install labels according to the Medupi Label specification, 200-

3340.

Any abbreviations to plant descriptions shall be prepared in accordance to the *Employer*’s abbreviation standard, 200-5343

Detailed nameplate or label lists with the service legends and including the KKS Code shall be prepared by the *Contractor* and submitted to the *Employer* for review and comment before commencing the manufacture of the labels. On plant areas where labels do not make ergonomically sense please consult site configuration management for guidance.

#### Plant Designation within Documentation

The *Contractor* shall prepare a list of KKS designations allocated to components for each scope of delivery or system (this list will be referred to as equipment list in the rest of this document for simplicity’s sake, but includes documents such as cable schedules, valve schedules, etc.). The equipment list shall be submitted with the original implementation documentation describing the design of the system (e.g. process and instrumentation diagram, single line diagram, etc.). The

*Contractor* shall ensure that the equipment list accurately represents the implementation documentation which it accompanies. The content of the lists will be agreed to per discipline with the

*Employer*. As a minimum, the equipment list shall include:

1. the KKS designation of all components within the relevant scope or system;
2. the full verbal description of each component compiled according to the standards referenced in this document;
3. the abbreviated description of each component, utilising abbreviations as listed in the referenced project abbreviation list, and abbreviated to a number of characters as required by the project Digital Control System (DCS) and as per the label requirements in, 200-3340;
4. the approval status of each component, in alignment with the list of approval statuses specified for document.

#### General Drawing and Model Requirements

All drawings shall comply with the Engineering Drawing Standard – Common Requirements 240- 86973501.

The *Contractor* shall include the *Employer*’s drawing number in the drawing title block. Drawing numbers shall be assigned by the *Employer* as drawings are developed.

The *Contractor* shall submit all drawings in PDF.

The 2D Drawings shall be structured according to the Plant Breakdown Structure to the level at which the plant is modelled.

Drawings that the *Contractor* submits for review and acceptance purposes shall have the compiler(s) and approver(s) signatures.

All submitted drawings shall be signed by the applicable Professionally Registered Engineer.

The *Contractor’s* structural steel and concrete drawings comply with SANS 10143 Building Drawing

Practice, and the structural steel engineering design drawings further comply to the Southern African

Structural Steelwork Detailing Manual by the Southern African Institute of Steel Construction.

#### Procurement

#### People

#### Minimum requirements of people employed on the Site

People employed to Medupi Power Station should undergo Safety Induction and Covid 19 screening and other courses before they can access the project site (Medupi Power Station)

The *Contractor* does not alter previous decisions communicated to the *Employer* or Others without the *Employer*’s acceptance or agreement.

Any new foremen/*Supervisor*s appointed by the *Contractor* after Contract Date or during provision of the Works are fully conversant with respect to details of the methodology and communication process existing, prior to accessing the Site. The *Contractor* provides the CVs and all other relevant information of the

replacement employees to the *Project Manager* as soon as possible after he is aware that a skilled employee will no longer be working on the Contract.

Permits for foreigners – The *Contractor* informs the *Employer* of any need to employ foreigners and on acceptance by the *Employer*, the *Contractor* arranges permits for such employees. The *Contractor* informs the *Employer* when the services of Specialists are required. The *Contractor* ensures interface with Others is managed before commitment is made to bring international specialist to Site.

The *Contractor* ensures that his workforce is trained and competent to perform their respective duties. The *Contractor* provides CVs and proof of qualifications of his key persons (listed in paragraph 2.7 of this Works Information) as a returnable schedule. Labour from designated areas – Where local labour resources can be utilised, the *Contractor* ensures that in their recruitment processes, preference is given to such resources. The Medupi information centre can be utilised for recruitment of local labour.

Industrial Relations: The *Contractor* will remunerate employees in accordance with the acceptable market remuneration / minimum wage. The *Contractor* manages all industrial relations matters with his employees

#### BBBEE and preferencing scheme

The company shall maintain or improve upon their current B-BBEE Contribution level for the duration of the contract. The supplier will be required to submit a new B-BBEE certificate within 3 months, should ownership of the company change during the life of the contract.

The *Contractor* is expected to submit a valid B-BBEE Verification Certificate from a SANAS accredited Verification Agency each year. Failure to submit such a Certificate may be regarded as the breach of the contract by the *Employer*

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

The Contractor complies with and fulfils the Contractor’s obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the Contractor’s SD&L Compliance Schedule.

#### Local Content and Production

This tender concerns a service that has material and commodities that are part of the designated sector as per regulation 13 of the Preferential Procurement Regulations, 2017 and Local Production and Content. Therefore, only locally produced goods or services with a stipulated minimum threshold for Local Production and Content are accepted.

|  |  |  |
| --- | --- | --- |
| **Commodity** | **Components** | **Local Content Threshold** |
| Fabricated Structural Steel | Latticed steelwork, reinforcement steel, columns, beams, plate girders, rafters, bracing, cladding support, stair stringers & treads, ladders, steel flooring, floor grating, hand- railing and balustrading, scaffolding, ducting, gutters, launders, downpipes, and trusses | 100% |
| PPE | Reflector Vests, Jackets, Boots, Textiles, Clothing, Leather & Footwear, etc. | 100% |
| Bagged and Bulk Cement | Cement | 100% |

#### Skills Development (not weighted criteria)

Eskom intends to improve Skills Development by ensuring that technical support is directed towards enhancing supply capacity and capability within the industry or sector of operation. By doing this the capacity and competitiveness of the local supply base will be increased and the goals of shared growth, employment creation, poverty reduction and skills development will be achieved.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Skills Category** | **Tenderers Proposal** | **Entry** | **output** | **Tenderers Target** |
| Work Integrated learning | 3 | S1-S4 or B-  Degree N3 or Grade 12 or Equivalent | On a job training or Experiential Training or P1&P2 |  |

#### 30% Sub-Contracting to the Designated Group in accordance

Not Applicable

#### Job Creation and/or Retention

Job creation proposals by tenderers will not form part of the tender evaluation criteria. It is however, part of Eskom’s contribution towards the Government’s job-creation initiative as contained in the New Growth Path (NGP) and the New Development Plan (NDP).

Eskom has made a number of empowerment commitments to the local communities surrounding the areas where it conducts its construction activities. Amongst these, are commitments to be considered for local empowerment possibilities in its procurement strategy. In doing this, *Employer* is seeking to ensure that the local communities’ benefit from its procurement spends through wealth generation and capacity development; and that this benefit is spread as widely as possible throughout the community.

All tenderers are therefore encouraged to propose to the *Employer* the number of semi-skilled and unskilled labourers that will be sourced from local to site in support of this empowerment commitment to the local communities**.**

#### SDL&I Monitoring and Reporting

1. The tenderers shall on a monthly /quarterly basis submit a report to Eskom in accordance with Data Collection Template on their compliance with the SD& L obligations described above.
2. Eskom shall review the quarterly reports submitted by the tenderers within 60 (sixty) days of receipt of the reports and notify the tenderers in writing if their SD&L obligations have not been met.
3. Upon notification by Eskom that the tenderers have not met their SD&L obligations, the tenderers shall be required to implement corrective measures to meet those SD&L obligations before the commencement of the following quarter, failing which retention clauses shall be invoked.
4. Every contract shall be accompanied by the SD&L implementation schedule which must be completed by the tenderers and returned to SD&L representative for acceptance **before** contract award. This will be used as a reference document for monitoring, measuring and reporting on the tenderer’s progress in delivering on their stated SD&L commitments.

#### SDL&I Penalty

Eskom shall be permitted to retain 2.5% (two and half percent) of the invoices (excluding VAT) as security for the fulfilment by the tenderers of their SD&L obligations.

Once Eskom has verified that tenderers have fulfilled their SD & L obligations, the 2.5% retained shall be approved for reimbursement by Eskom to suppliers within 90 (ninety) days of verification by Eskom.

#### ii. Subcontracting

* + 1. **Preferred Sub*contractors***

The *Contractor* makes use of any supplier or any Sub*contractor* for Plant and Material to execute the works provided that all supplied Plant and Material complies with SABS.

The names of all proposed Sub*contractors* should be submitted to the *Employer* for vetting and approval as a returnable schedule. The *Contractor* notifies the *Employer* of the appointment of all Sub*contractor*s prior to them starting work.

#### Subcontract documentation, and assessment of subcontract tenders

* + - 1. The *Contractor* uses the NEC3 form of subcontract for all subcontracts as per Section 26 Sub-Contracting of the contract.
      2. The *Contractor* provides the B-BBEE status level verification certificates for all Sub*contractor*s.
      3. The *Contractor* informs the *Employer* when it submits *Subcontractors*’ parts of the Works
      4. The *Contractor* only employs qualified suppliers as specified in section 4.2.1.

#### Limitations on subcontracting

Eskom Procurement and Supply Chain Management Procedure 32-1034 is applicable read together with the following:

1. The *Contractor* does not sub-contract more that 25 % of the contract value to other enterprise that does not have equal or higher B-BBEE status level, unless the intended Sub-*Contractor* is an Exempted Micro Enterprise that has the capability and ability to execute the sub-contract.
2. In relation to a designated sector, the *Contractor* will not be allowed to sub-contract in such a manner that the local production and content of the overall value is reduced below the stipulated minimum threshold (Percentage of the specific contract).
   * 1. **Attendance on Sub*contractor*s**

The Sub*contractor* attends all meetings which the *Contractor* attends and all meetings as required by the *Employer* which requirement is not a compensation event.

#### Plant and Materials

#### Quality

The *Contractor* shall inform the *Employer* of any proposed changes to the Quality Management system or staff that will affect the quality system prior to implementation of these changes.

The *Contractor* shall be ultimately accountable and responsible for the development and proper implementation of all QCP/ITP including those reviewed or developed by sub-*Contractor*s.

A quality kick-off meeting will be held at the start of the contract, to workshop the *Contractor* of internal process in place

Inspection activities during construction shall be managed according to the Medupi Site Quality Assurance Control and Verification works Instruction (348 – 106670).

Data books

* The *Contractor* shall beforehand, ensure that all document to be filled in a data books are reviewed and approved for use. Data book shall be reviewed progressively during 30%, 70% and 100% of the completion stage of the works.
* The *Contractor* shall provide evidence of self-review of data book at each interval of works as defined above in the form of a comment sheet.
* The *Contractor* shall ensure that all comments from the *Employer*s are addressed and an evidence must be produced to the *Employer* at the successive reviews.
* No data book review request shall be conducted by the *Employer* without the *Contractor*s review comment sheet reflecting that a review was done by the *Contractor*.
* The *Contractor* shall develop a Data book Register which shall be maintained and shared by the *Contractor* on weekly basis with the *Employer*, for the duration of the project.

Refer to Quality Assurance requirement section above. See also ISO 9001; 2015 and 200-1689 respectively

The Quality Management philosophy is developed from the basis that manufacturers produce quality products, Eskom design engineers ensure quality, Eskom quality inspectors and/or third- party inspectors verify quality and the project team monitors quality. All the parties involved are contracted according to this principle.

Product quality control plans will be produced by the *Contractor* or manufacturer which will indicate the level of product quality control to be applied. These plans will be reviewed by Eskom Engineers together with the quality team. The project team monitors that these plans is being implemented and that it is yielding the expected results through process and product verifications.

Monitoring means the minimum number of activities through which the project team assures itself that the *Contractor’s* delivers engineering deliverables, equipment and the plant to the required quality.

There will be complied with the Eskom Quality Standard, QM 58.

All work should be done in accordance with the quality management system of Medupi Power Station as set out in the quality manual, in addition to the ISO 9001:2008 quality management system. High quality standards are also assured by conforming to the following:

* + - 1. The use of sound design and engineering principles,
      2. The design process uses a good performance and functional specification,
      3. It is ensured that the installation conforms to the User Requirement Specification and Works Information.
      4. Design Review Procedure is followed
      5. Engineering Change Procedure
      6. Electrical Asset Creation Process
      7. QA/QC on project (manufacturing, installation, commissioning)

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

To be dealt with “as and when” the need arises in terms of the conditions of the contract.

***4.3.3. Contractor’s* procurement of Plant and Materials**

The *Contractor* supplies all Other Plant and Material. The *Contractor* provides a list of this in the *Contractor’s* Works Information. The transport section (functional unit) is suitable for handling and removal by providing mechanism for crane hooks. The transport section is suitable for handling and removal by providing mechanism to avoid damage to the functional unit.

Transportation of the equipment will be done as per the requirement of 240-56178825. During transportation the electrical components are packaged in such a way that damage is prevented.

Components of the functional unit that are transported separately are marked accordingly and are easily identifiable.

The *Contractor* supplies the labelling for the Plant that forms part of the Works. The *Contractor*

provides labels according to the labelling specification.

The labels are affixed in such a way that they are easily legible and not obstructed by the wiring or by other components.

Clamping methods applied to the labels ensures that removal of the labels requires force. The

*Project Manager* will approve the proposed method of clamping prior to use.

The *Contractor* supplies the *Project Manager*, for verification and acceptance purposes, with a label list showing the text only. The *Project Manager* will approve the positioning and designation of labels.

The KKS codes are used accordingly on documentation (e.g. drawings, manuals, equipment lists, cable schedules etc.) as a unique identification means. References to plant are accompanied by the relevant KKS code for that item of plant.

Abbreviations to descriptions on the labels are generally not acceptable. Where abbreviations are unavoidable, due to the limited number of characters that can be engraved/etched on labels, the abbreviations are submitted to the *Project Manager* for acceptance. The *Contractor* makes use of the *Employer’s* Standard Plant Related Abbreviations for Inter-System Use.

Where equipment requires prolonged storage due to the outage movement, the *Contractor* will store the equipment where required.

Warranty period for the plant materials will start during take-over.

#### 4.3.4 Spares and consumables

Spares and consumables are to be as per scope of work from the *Employer* where applicable and the following noted. The *Contractor* supplies the *Employer* with a detailed complete list of all spares required in order to maintain the equipment for the first two years of operation.

At the same time, a second list containing recommended spares for the subsequent two years of operation is also supplied.

Included in the list is the description of the individual spares, type, part ordering number and supplier information.

Where so requested by the *Employer*, additional equipment is supplied at the same price as quoted in the [Activity schedule].

The *Employer* prefers that support from the Original Equipment Manufacturer (OEM) is available locally in South Africa. The *Contractor* is required to keep high cost items such as circuit breakers and voltage transformers in stock for 24 hours delivery on demand, and to provide technical and product support for the design life.

#### Tests and inspections before delivery

Inspection activities during manufacturing shall be managed according and in line with the Manufacturing Inspection and Testing work instruction (348-860842).

Where a product nonconformity is identified by the *Contractor* to a system, product or process, a nonconformity shall be documented and reported to the *Employer* as detailed on Control of nonconformity product (200–15327)

Section 4 and Core Clauses 40 and 41 both make reference to the Works Information regarding tests and inspections. The *Employer* carries out quality inspections at his discretion.

All inspections and testing to be performed in accordance with the Quality Control Plan (QCP) and Method statement developed by the *Contractor* in consultation with the *Employer.*

#### Test certificates

One copy of all test certificates must be submitted to the *Employer* for approval as a returnable schedule to substantiate the details stated in the *Contractor’s* Works Information.

Two copies of all the required test certificates must be supplied to the *Employer* prior to take over of the Works

#### Marking Plant and Materials outside the Working Areas

One copy of all test certificates must be submitted to the *Employer* for approval as a returnable schedule to substantiate the details stated in the *Contractor’s* Works Information.

Two copies of all the required test certificates must be supplied to the *Employer* prior to take over of the Works.

All Plant and Material paid for by the *Employer* must be clearly labelled as being the *Employer*’s property.

* 1. ***Contractor’s* Equipment (including temporary works)**

The *Contractor* provides lifting facilities for all the construction *works* that are not on the zero- meter level. The *Contractor* also considers areas that are strained and above zero-meter level. The supply of these facilities may not affect the delivery of the *works.*

* 1. **Cataloguing requirements by the *Contractor***

Where cataloguing is applicable the *Contractor* consult Procurement Instruction Number 1 of 2018 – Incorporating Cataloguing into the Procurement Environment, Unique Identifier 240- 1289988974

#### b) Construction

#### Temporary works, Site services & construction constraints

#### *Employer*’s Site entry and security control, permits, and Site regulations

The *Contractor* makes his own assessment of, and allowance in his Prices for any access problems as a result of the *Employer*’s security requirements, permits and/or Site regulations. No change to the Prices, Key Dates and/or Completion Date is allowed on account of difficulties of access to the works, or for the requirement of working adjacent to or in the same area as *others*.

Access to the Site is controlled and governed by the terms and conditions laid down by Medupi Power Station. The Site is shown to the *Contractor* during the site meeting or clarification meeting. Parameter of the proposed Site will be included in the Site Information.

The *Contractor* liaises with the Medupi Power Station security staff in order to obtain temporary permits for his staff and vehicles which will be working within the station.

The *Contractor* submits his application for vehicle permits to the *Project Manager*. The personnel and vehicles entering and leaving the site are subjected to routine searches and alcohol tests. The *Contractor* ensures that all its employees and sub-*Contractor*s carry their access cards at all times.

The *Contractor* obtains a “Gate Permit” from the *Employer* before materials and equipment can be removed from site. A “Gate permit” gives an itemised list of materials and equipment to be removed from site.

The *Employer* refuses access to Site for reasons such as security concerns; disorderly conduct, substance abuse, misconduct, criminal records. The *Contractor* is not entitled to a change in Prices, Key Dates and/or Completion Date as a result of this.

#### Restrictions to access on Site, roads, walkways and barricades

The *Contractor is* required to comply with all the Medupi Power Stations site rules and regulations. The *Contractor* complies with the Site a copy of which is available at the *Project Manager*’s offices.

Any subject within the authority of the *Project Manager* may be addressed by a Site regulation which does not constitute a compensation event.

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

The *Contractor* is issued with current Site regulations at the project kick-off meeting. The file remains the property of the *Project Manager* and the *Contractor* is responsible for its maintenance and updating to include new or revised regulations as issued by the *Project Manager* during the course of the works

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

People restrictions and constrains, the hours of work will be as per the project calendar, conduct and records as per the Terms and Condition of the contract. The *Contractor* would need to comply with Medupi Power Stations site rules and regulations. Restrictions and hours of work will apply at the Medupi Power Station. The *Contractor* keeps records of his employees on Site, including those of his *Subcontractor*s which the *Project Manager* or *Supervisor* has access to at any time. These records may be required by the *Employer* at any given time for the following but not limited to:

* + - 1. Emergency (evacuation/drill) and investigations
      2. Labour unrest
      3. Absenteeism
      4. Sick leave
      5. Assessments (labour hours timesheets)

#### Health and safety facilities on Site

Refer to the Section 2.3 above.

* + 1. **Environmental controls, fauna & flora, dealing with objects of historical interest** Refer to EMP and ROD referenced above and as per the latest revision of the Medupi Power Station Environmental Policy which is available from the *Project Manager*.

#### Title to materials from demolition and excavation

The *Contractor* has no title to materials from excavation, demolition, stripped and material removed from site or the plant (e. g. copper, steel etc). The *Contractor* notifies the *Project Manager* when such materials are found, and the *Project Manager* instructs the *Contractor* how to deal with such materials. In circumstances where certain equipment is required for spares, the *Project Manager* gives special instruction detailing a specific storage area and identifying which parts to be stripped and where different types of stripped material will be taken to.

#### Cooperating with and obtaining acceptance of Others

There will at times be Others working in the same area as the *Contractor*, it is the responsibility of the *Contractor* to co-ordinate his work with the *Employer* and *Other*s to maintain harmonious working conditions on Site.

During the progress of the works the *Contractor* provides access to Others who also execute work in the same area, as and when required and agreed with by the *Employer*.

The *Contractor* makes his own assessment of the challenges which may be encountered for providing access to and interfacing with Others (this includes access difficulties experienced during construction or commissioning phase). Where there are difficulties or unresolved interfacing or access issues the *Contractor* must ensure that they meet with Others to find solutions or resolve issues without impacting his/her execution of the works. The *Contractor* is not entitled to a change in Prices, Key Dates and/or Completion Date as a result of the interface obligations or the *Contractor’s* assessment.

If the *Contractor* and Others are unable to resolve the problem, they will meet with the *Employer* in order to find a solution or resolve the issue. The *Employer* will issue an instruction to the *Contractor* and *Other*s on how to proceed. In areas where affected property or area is to be shared for work by different *Contractors,* affected *Contractor*s have to cooperate and manage their agreements and notify the *Project Manager* of such agreements.

#### Publicity and progress photographs

No photographs are allowed to be taken or distributed on site unless permitted to do so by the *Project Manager* and the following process adhered at all times*.* The taking of photographs at the Power Station including the Project *Works* is restricted and subject to the approval by the *Project Manager*.

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

All publications on site must not contradict Eskom regulations and publication legislation in general.

* + 1. ***Contractor’s* Equipment**

*Contractor* is responsible to all equipment brought onto site. Refer to Clause 4.1 in SANS 1200 A

* + - 1. The *Contractor’s* Equipment does not impair the operation or access to the plant.
      2. The *Contractor* provides all or any temporary and expendable materials required for the storage of material.
      3. The *Contractor* provides a list of all Equipment on Site whether it is owned or hired, for record purposes.
      4. The *Contractor* ensures that all his equipment on site including scaffolding has unique identification

#### Note : For any removal of equipment from site, refer to section 5.1.1

* + 1. **Equipment provided by the *Employer***

The *Employer* will not provide any equipment to the *Contractor*. All necessary equipment needs to be provided by the *Contractor.*

The overhead cranes in the turbine hall will be made available to the *Contractor* for the execution of the Works. The *Contractor* is to manage interface with Others for the usage of the cranes.

Should a mobile crane be required for the execution of the Works, it will be supplied by the *Employer*, only if it is available. Arrangements for a mobile crane must be made at least two weeks prior to the required date. The *Employer* will be responsible for operating the mobile crane; however, the *Contractor* is required to provide its own certified riggers. The *Contractor* is not entitled to a change in Prices, Key Dates and/or Completion Date due to unavailability of both overhead and mobile cranes.

The *Contractor* must ensure that the test certificates (e.g. load testing of cranes) for the equipment are available prior to use.

#### Site services and facilities

The *Employer* will provide power, water, waste disposal, sewer connection points If applicable. The *Contractor* will be responsible for the material and connection to the connection points or to the mains. The *Employer* will fill the water tanks with water and remove sewage from septic tanks.

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

A site will be made available to the *Contractor* for his yard within the Medupi Power Station security area. The proposed Site will be shown to the *Contractor* during site meeting or clarification meeting. The yard is a raw site and will be used by the *Contractor* for the establishment of offices, workshop and stores. The *Contractor’s* yard is subject to periodic inspection and audited by the *Project Manager*/delegated person.

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

The *Contractor* conducts underground surveys before any excavation is performed as per Eskom SHE specification and Occupational Health and Safety regulations.

#### Supply of Electricity

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

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

No connection is made to the permanent installation at the Medupi Power Station without the prior acceptance of the *Project Manager*.

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

* + - 1. 32-846, Operating Regulations for High-Voltage Systems
      2. 36-681, Generation Plant Safety Regulations
      3. COC for the site installation is required prior to power being switched on

All electrical works to be carried out by a Master Installation Electrician (MIE). The *Contractor* also provides a Certificate of Compliance (COC) to prove compliant to electrical work. The certificate to be included into data book for review.

#### Lighting

The *Contractor* at his own expense provides temporary local lighting in accordance with the requirements of the OHS Act as amended

#### Water

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

The *Project Manager* does not guarantee continuity of supply and the *Contractor* makes his own provision for standby supplies to maintain continuity of work. The *Contractor* is not entitled to a change in Prices, Key Dates and/or Completion Date for any discontinuation or interruption of water supply.

#### Roads

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

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

#### Setting-Out Beacons

The *Employer* provides permanent beacons marking the main setting out grid lines for the *works*, and permanent level benchmarks.

The *Contractor* takes reasonable steps to preserve beacons and benchmarks provided by the *Employer* who is not to be held responsible if any existing beacons are removed as long as other beacons exist.

* + 1. **Facilities provided by the *Contractor***

The *Contractor* is to provide all office and ablution facilities (structures or chemical toilets), including covered storage working areas, eating area, if applicable. The *Contractor* is to provide in the way of accommodation, laboratory services, storage, vehicles and office equipment. The *Contractor* to provide water tanks and septic tanks if there is no main water or sewer connection in the allocated *Contractor*s yard. All associated work and material will be for the *Contractor’s* account.

The *Contractor* includes in his establishment rates all further treatment of the yard areas that he considers necessary for his entire operation throughout his period of occupation and under all weather conditions. The *Contractor* also includes for all security fencing, security and access arrangements. The yard is kept clean and tidy at all times, this includes all workshops and storage areas under the control of the *Contractor*. Maintenance of the yard is the *Contractor*s responsibility. If the yard is not adequately maintained, the *Employer* instructs the *Contractor* to maintain the yard to the appropriate standards of which instruction does not constitute a compensation event.

Outfall drainage of all surface run-off drains is constructed by the *Contractor* to the acceptance of the *Employer* to minimise erosion and to effect control of contaminated water. The *Contractor’s* plan for the layout of his yard area is accepted by the *Employer* prior to occupying the yard and the *Contractor* does not occupy any site area Other than that allocated to him. The *Contractor’s*

plan states fully what measures are taken regarding removal and storage of topsoil, stabilisation of eroded areas and further loss of topsoil.

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

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

#### Telecommunications

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

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

#### Sanitary Facilities and Refuse

The *Contractor* is to supply own sanitary facilities at his *Contractor’s* yard.

A refuse control system will be established by the *Contractor*. All waste and refuse will be collected and disposed of as directed by the *Employer* as per the latest revision of the Medupi Power Station management of waste Policy which will be made available by the *Employer*.

#### Equipment/Appliances

Any electrical Equipment, or appliances, used by the *Contractor* conforms to the applicable OHS Act safety standards and is maintained in a safe and proper working condition. The *Project Manager* has the right to stop the *Contractor’s* use of any electrical Equipment, or appliance,

which, in the opinion of *Project Manager*, does not conform to the foregoing. Inspection of equipment/appliance will be done as required by OSH Act.

The *Employer* may assist the *Contractor* with the off-loading of Equipment, Plant and Material but the responsibility for off-loading remains with the *Contractor*.

#### Existing premises, inspection of adjoining properties and checking work of Others

Where the *Contractor* requires to work in the same area as Others either at the same time or consequentially or there is interface with Others either at the same time or consequentially (“the Overlap”), the *Contractor* notifies the *Employer* and Others. The *Contractor* includes the Overlap in his programme and ensures others also include it in their programmes. The *Contractor’s* programme will be rejected in accordance with clause 31.3 of the NEC if he fails to do so.

The *Contractor* notifies the *Employer* and Others a minimum of [two] calendar weeks before the Overlap starts. The *Contractor* inspects the Overlap area on the day he is to start work, liaises with Others and completes a report on the Overlap area and the works in the Overlap area. He submits to the *Employer* within [48] hours of the date of starting work. The *Contractor* who requires access is responsible for compiling the report. His report includes the adequacy of the Overlap area, the works in the Overlap area;

damage to the Works, a record of Others working in the Overlap area and any *Other* constraints in the area. The Others working in the Overlap area also sign the report. The *Contractor* does the same when he completes the work in the Overlap area. The *Contractor* promptly notifies the *Employer* of any damage to his works or any other part of the Overlap area on both starting and completing his works and provides an explanation of how the damage occurred. The *Contractor* caters for the time for this activity in his revised programme for acceptance to ensure that there is no delay on his part.

The *Contractor* identifies all interfaces with *others* in his *Contractor’s* Works Information and as required by paragraph 2.6 of this Works Information and does so for the execution of the Works. The *Contractor* inspects the works of Others whom he has identified as an interface point and where alignment and compatibility between the Works and Others’ works is required. Similarly, the *Contractor* also allows Others to inspect his works as required by them.

#### Survey control and setting out of the *works*

The *Project Manager* designates the working area boundary limits and assigns for the *Contractor’s* use access roads, parking areas, storage areas, existing facilities areas and construction areas. The *Contractor* does not trespass in or on areas not designated for his work. The *Contractor* is responsible for keeping *Contractor’s* personnel out of areas not designated for *Contractor’s* use, except, in the case of isolated work located within such areas for which the *Contractor* is authorised to do so.

#### Excavations and associated water control

In addition to the requirements of paragraph 2.6 of this Works Information, the *Contractor* notifies the *Project Manager* a minimum of four (4) calendar weeks prior to commencing excavation. The *Contractor* identifies all services in the areas affected by the excavation works and notifies the *Employer* and Others of his findings a minimum of three (3) weeks prior to commencing excavation.

The *Contractor* conducts underground surveys before any excavation is performed as per Eskom SHE specification and Occupational Health and Safety regulations. All services need to be verified by the *Contractor* prior to excavation.

#### Underground services, other existing services, cable and pipe trenches and covers

The *Contractor’s* method statement must include how he will deal with known services and any unknown services which become known to the *Contractor* during the execution of the Works. The *Contractor* accepts responsibility for the protection of all pipes, gauges and the plant area. The *Contractor* immediately, and in any event no later than 1 hour, notifies the *Project Manager* if he damages any services.

The *Contractor* remedies any damage caused or procures the services of a third party to remedy such damage. The *Contractor* is liable for all damages, including damages suffered by Others and third parties, arising from or in connection with all services including the protection of all pipes, gauges and the plant area.

#### Control of noise, dust, water and waste

The *Contractor* complies with the more stringent of all Laws, Eskom standard and Medupi communicated documentation. This includes areas allocated for storage of materials, site offices and all Other working areas. If a particular standard is not specified, the *Contractor* complies with the *Employer*’s requirements of which requirement are not a compensation event. The *Contractor* keeps the Working Areas clean and free from accumulation of waste materials and refuses regardless of the source.

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

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

“waste” means any matter, whether liquid or solid or any combination thereof, which is a by- product, emission, residue or remainder of any process or activity carried out in connection with the Works and which is not reused promptly and, in any event, no later than three calendar days after production, in the carrying out the Works.

The *Contractor* provides a sufficient number of marked bins and/or containers as and where required for the temporary storage of waste. The types of bins and/or containers comply with the latest revision of the procedure Management of Waste at Medupi. The *Contractor* segregates waste in accordance with the Medupi Power Station requirements.

Bins and containers are emptied, and waste removed to the designated area at least once a week. The temporary and waste are removed to the designated area at least once a week. The temporary storage areas for bins and containers are maintained and not constitute a nuisance to Others. The *Contractor* ensures there is no spillage of waste alongside the bins and containers at any time

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

Hazardous waste is dealt with in accordance with the Laws, Eskom standards, Medupi Power Station requirements and the Contract. The *Contractor* is solely responsible for the proper disposal of hazardous waste.

#### Sequences of construction or installation

The *Contractor* is responsible for the construction and installation of the equipment according to the *Contractor’s* construction and installation plans.

The *Contractor* complies with the *Employer*’s Work Co-ordination Process.

Without derogating from the provisions of the Conditions of Contract, the Work Co-ordination Process is used by the *Project Manager* to monitor and manage activities on the Power Station and to facilitate the integration and co-ordination of the various works by Others.

If not included in the contract, the Project Manager will notify the *Contractor* of the requirements of the Work Co-ordination Process prior to the date of site establishment by the *Contractor*.

The *Contractor* is responsible for the construction and installation of the Plant and Materials according to the *Contractor’s* method statement. The *Contractor* ensures that method statements as a minimum are conducted for the following:

* + - 1. Designing a new job or task;
      2. Changing jobs or task;
      3. Introducing new equipment or substances; and
      4. Reviewing a procedure when problems have been identified, for example, from near miss incidents or an accident/incident investigation.
      5. Simultaneous execution of the tanks as per the approved *Contractor* method statement.

The *Contractor* ensures that method statements and safe work procedures as a minimum contain the following:

1. The level of supervision required for the task
2. The training and qualifications required by the workers to perform the task
3. The Supervisor for the task or job and the employees who will undertake the task
4. The tasks that are to be undertaken that pose risks;
5. The equipment and substances that are used in these tasks;
6. The control measures that have been built into these tasks;
7. The personal protective equipment to be worn
8. Actions to be undertaken to address safety issues that may arise while undertaking the task.

All method statements must be submitted to the *Employer* for review and acceptance before any work commences. Method statements and safe work procedures must be submitted to the *Employer* a month before commencement of the works however during construction method statements and safe work

procedures for any new activities are submitted to the *Employer* for review and acceptance three days prior to the activity taking place, all method statements and safe working procedures must be accompanied by a relevant risk assessment

Rejection of the method statement or safe work procedure due to non-conformance of the

*Contractor* does not constitute a compensation event.

In addition to the requirements of paragraph 2.6 of this Works Information, the *Contractor* provides for access to *Other*s and allows for interface, alignment and compatibility between his sequence of construction or installation activities and *Other*s’ sequence of construction or installation activities. Similarly, the *Contractor* accommodates *Other*’s requirements in relation to interface, alignment and compatibility of their sequence of construction or installation activities.

#### Giving notice of work to be covered up

The *Contractor* notifies the *Supervisor* a minimum of 5 working days prior to commencing work to be covered up. The *Contractor* notifies the *Project Manager* and *Supervisor* in writing of all planned activities for the week.

#### Hook ups to existing works

Plant and Material may not be modified without express written permission from the *Project Manager*.

The *Contractor*s may not hook up for lifting, supporting or for any other reason to any position or exiting works in the plant without a written position of the *Project Manager*. If the *Contractor* requires the use of existing infrastructure, it needs to be arranged with the Project Manager.

#### 5.1.20.1 Permit to Work (PTW) system (this applicable now at Medupi as the plant is live)

The *Contractor* allocates staff to be trained and authorised as Responsible Persons according to *Employer*’s Plant Safety Regulations and/or High Voltage Regulations. These Responsible Persons are available on Site as and when required to take out permits to work.

#### Completion, testing, commissioning and correction of Defects

#### Work to be done by the Completion Date

On or before the Completion Date the *Contractor* shall have done everything required to Provide the Works except for the work listed below which may be done after the Completion Date but in any case before the dates stated. The *Project Manager* cannot certify Completion until all the work except that listed below has

been done and is also free of Defects which would have, in his opinion, prevented the *Employer*

from using the *works* and Others from doing their work.

No alterations or adjustments will be made to the *Works* after final checks are done without the

*Project Manager’s* written permission.

At this stage the following must have been achieved:

* + - 1. Installation and pre-commissioning completed.
      2. Testing report and the associated certificates received.
      3. Signed erection and safety clearance certificates.
      4. Final Draft of the Technical, Operating, Maintenance manuals delivered
      5. All Quality Control Plan (QCP) documentation received.
      6. All Data Books submitted and accepted by the *Employer*

The *Project Manager* cannot certify Completion until all the work including that listed above has been done and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the works and *Other*s from doing their work.

Sectional completion of the work will be when the entire system/ equipment is connected to the system and commissioned or operational.

|  |  |  |
| --- | --- | --- |
|  | **Item of work** | **To be completed by** |
|  | As built drawings of the completed Works | Within 14 days after Completion |
|  | Performance testing of the *works* in use as specified in paragraph 5.2.8 of this Works Information. | See performance testing requirements. |
|  | All Works to be inspected and detailed report submitted to the *Employer*. (Works to be provided as stated in the Works Information) | As per the Accepted Programme |

#### Use of the *works* before Completion has been certified

As per clause 35.2 of the Contract, the *Employer* uses the works, without taking over the works, before Completion for reasons relating to the operation of the Medupi Power Station, commissioning, and/or capability testing of the works and associated plant area.

#### Materials facilities and samples for tests and inspections

Refer core clause 40.2. Where applicable, The *Employer* does not provide any Materials, facilities and/or

samples for tests and inspections. The *Contractor* provides all Materials, facilities and/or samples required for tests and inspections.

The *Contractor* provides a schedule of all the required tests and connections as well as areas where these will be performed to the *Project Manager* for acceptance.

* + - 1. Testing for all the electrical work
      2. Equipment to use for doing the testing may need to be inspected.
      3. Providing facility for testing to assure *Employer* of the quality of the works.
      4. Earthing test equipment etc.

#### Commissioning

The *Contractor* shall perform Safety clearance and commission the tanks as per Eskom Commissioning procedure

Commissioning will not start until the following documents that are required for the commissioning of the plant is accepted by the *Project Manager*:

* + - 1. All relevant drawings (as-built)
      2. All type and routine test certificates

The *Contractor* provides the *Employer* with the following documents minimum of [four] calendar weeks before the date of commissioning:

1. erection completion certificate handed to the *Project Manager,*
2. the dates of the tests listed in paragraph a-k below;

The *Employer* elects as his sole discretion to attend the tests listed in paragraphs a-k below. The *Contractor* conducts, amongst others, the following tests and checks in order for the *Employer* to allow commissioning to occur:

1. Adjustment setting, operational checking and electrical injection testing of each relay, functional unit, circuit and accessory prior to installation of cables.
2. Check for any visual damage to the circuit breakers, current transformers, bushings/insulators, instruments, switches, auxiliary relays, and all other equipment.
3. Check tightness (torque where applicable) on all connections.
4. Power frequency voltage test where applicable.
5. Check the continuity of all current transformer and voltage transformer loops where applicable.
6. Check the fixing and locking devices on doors and covers.
7. Repetition of all functional tests (i.e. mechanical, electrical and automation functions) on some parts of the plant as done in the *Contractor’s* premises.
8. Check the operation of all mechanical/manual devices for racking, earthing and spring rewind.
9. Verify the operation of the interlocking system’
10. Any Other tests and checks required in terms of the *Contractor’s* interface, alignment and compatibility obligations and requirements;
11. any Other tests and checks specified in the *Contractor’s* Works Information;

The *Employer* conducts his own erection and commissioning checks to ensure conformance with the Contract. These checks do not release the *Contractor* of his obligation to ensure compliance with the Contract.

The *Contractor’s* failure to ensure compliance with all the pre-requisites for the *Employer* to allow commissioning to proceed will entitle the *Employer* to claim all damages arising from or in connection with this breach, including damages suffered by *Other*s.

* 1. The *Contractor* conducts the following tests as stipulated above in order for the *Employer* to certify that commissioning has occurred in accordance with the Contract requirements.
  2. Any tests required in terms of the *Contractor’s* interface, alignment and compatibility obligations and requirements;
  3. any tests specified in the *Contractor’s* Works Information;
  4. any tests and required by Best Industry Practice

The *Contractor* includes the following tests and checks in order for the *Employer* to certify SAT once the erection of the Plant has been completed:

1. Any tests required in terms of the *Contractor’s* interface, alignment and compatibility obligations and requirements;
2. any tests specified in the *Contractor’s* Works Information;
3. any tests and required by Best Industry Practice

Once the *Contractor* has satisfactorily completed all his tests, the

Upon completion of commissioning, the *Contractor* provides drawings incorporating the changes arising from or in relation to commissioning within 14 calendar days.

The *Contractor* provides all necessary resources during the erection, installation, testing and commissioning of the Works.

Records are to be kept of each SAT in a log book defining the tests to be undertaken, time and date of the commencement of the test, duration of the test, criteria that need to be met and results entered of the tests. These records are submitted to the *Project Manager*.

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

The *Contractor* gives the *Project Manager* written notice that the Works are ready for energization. The *Contractor* commences with energisation no more than 48 hours after commissioning and testing is completed. The *Contractor* provides the *Employer* with no less than 5 working days of the date on which energisation occurs.

No alterations or adjustments will be made to the Works after final checks are done without the

*Project Manager*’s written permission.

At this stage the following must have been achieved:

* + - 1. Installation and pre-commissioning completed.
      2. Testing report and the associated certificates received.
      3. Signed erection and safety clearance certificates.
      4. Final Draft of the Technical, Operating, Maintenance manuals delivered.
      5. All Quality Control Plan (QCP) documentation received.

#### Take over procedures

Take-over is after or at the same time as Completion. The *Employer* takes over the Works on the date of safety clearance in accordance with the sectional completion dates of the Accepted Programme.

Once the section of the Works is complete as per the accepted programme and the Key Date, a Completion Certificate may be issued. (It is the *Contractor*s responsibility to apply for the Completion Certificate).

#### Access given by the *Employer* for correction of Defects

Refer to Clause 43.4 requires that the *Project Manager* arranges for the *Employer* to allow the *Contractor* access to and use of a part of the *works* which has been taken over if needed to correct a Defect. After the *works* have been put into operation, the *Employer* may require the *Contractor* to undertake certain procedures before such access can be granted

#### Performance tests after Completion

Test to be conducted:

1. Concrete Tests
2. Soil Tests
3. Roads
4. Functional test
5. Pressure and leak tests

#### 5.1..3 Training of Maintenance Personnel

Maintenance personnel will be trained in all components and functions of the HVAC system i.e. Method of maintenance, fault finding, correction, routine maintenance. Training will include familiarisation with documentation (maintenance plan, procedures etc.), hardware familiarisation, and hardware maintenance, control and instrumentation. Maintenance training to be provided prior at a local site on the venue that will be determined by the *Project Manager*.

#### 5.1..4 Training of Maintenance Operators

Operators will be trained on the prototype systems and declared competent in accordance with the manufacturer’s requirements on the new systems prior to the respective unit and commissioning. This will include familiarisation with documentation including drawing configuration logic, as well as operator interface familiarisation e.g. operational functions, alarms etc. The *Contractor* makes provision for training of all operators, for every shift on the unit

#### 5.1..5 Trainee Participant

The number of participants to be trained will be agreed upon and as per Eskom requirement before Contract Date. The *Employer* bears the cost of salaries, accommodation, travelling expenses and other allowances of his personnel during the training, but all other training costs are borne by the *Contractor.* The attendees will be certified and declared competent by the *Contractor* on the new systems after completion of the training where necessary

#### 5.1..6 Training Documentation

The *Contractor* provides all course material including manuals in accordance with the requirements of the *Employer* for training. The course material is in English and includes all third- party documentation.

A copy of the training documentation is supplied for each attendee with an additional 3 master sets to the *Project Manager.*

The training dates are included and shown in the Accepted Programme. The supply of drafts, pre-print proofs and printed copies of training documentation is planned by the *Contractor* in such a way that the required training is complete before commissioning of the first unit commences.

The *Contractor* ensures that all changes are incorporated in the training manuals. The *Contractor* promptly, and in any event prior to the next training, updates the training manuals and issues the updated training manuals in the manner and number stipulated above with an electronic copy to the *Project Manager*. This obligation exists up to the date of issue of the Defects Certificate for the whole of the works.

#### 5.1..7 Training, Maintenance and Operating (TMO) Manual

Instruction manuals comply with the requirements laid down in Eskom standard OPS 0002. The number of copies is as specified in Annexure [referred to in paragraph 5.2.8 above]. The *Contractor* provides electronic and hard copies of the manuals prior to delivery of the first Laboratory systems.

#### 5.2.10 Operational maintenance after Completion

The maintenance of the equipment will be the responsibility of the *Employer* and the cost of such maintenance does not form part of the Works. If the Works does not meet the mean time between failure ratios, the *Contractor* is liable for all costs associated with remedying the Works and ensuring that the mean time between failure ratios are achieved.

1. The *Contractor* to price for the maximum number of people it requires per trainer and price for this. The pricing must be shown in such a way that the *Employer* is able to determine the cost of increasing the number of attendees and/or the number of training sessions.
2. The *Contractor* is not allowed to increase the cost of training if the attendees increase up to [30%].
3. All costs (Other than those stipulated in the pricing guidelines) are for the *Contractor*.

#### Completion

The contract is deemed to be complete when the following have been completed in accordance with the relevant specifications:

1. The Plant is erected, and commissioned
2. The final drawings have been submitted
3. All documentation has been submitted
4. The Plant and all documentation I drawings are coded and labelled
5. All special tools have been supplied

The Completion date for the whole of the Contract Works is as stated in the Notification of Acceptance, and the Completion dates for the Sections of Work are as accepted programme and in accordance with clause X5.

#### Delays

In the event of delay having occurred to the completion of the Works or part thereof, how so ever caused, the *Employer* have the power, after having given the *Contractor* seven days’ notice of its intention, to take occupation of or take possession of or use the Works or part thereof in a reasonable and proper manner and at the *Contractor’s* risk until the Woks or part thereof has been completed in accordance with the provisions of the Contract.in accordance with X7

#### Damages

Delay damages X7 shall apply as stipulated in the Contract Data.

#### Defects period

During this period the plant is inspected at monthly intervals. These monthly inspections are carried out by the *Employer* who was responsible for the commissioning or any other *Employer‘s* approved substitute, and he shall submit a report in writing after each inspection, noting any deviations in plant performance and the probable reasons thereof. By copy of this report handed to the plant supervisor, the *Contractor* draw attention to any unauthorized alterations to control or safety device settings, which may have occurred during the interim. The *Contractor* also provides plant record books where any changes to plant adjustments shall be recorded, together with the reasons for the changes. Routine maintenance, like filter servicing is carried out by the *Employer‘s* maintenance staff. The *Contractor* liaises with them in this respect to overcome any difficulties which may be experienced.

The *Contractor* complies with all standards, specifications and regulations contained in 240- 56227573 and the following standards as highlighted within this *Works* Information.

The *Employer* provides all Eskom standards documents with the enquiry, unless stated otherwise in the Works Information. All other standards and references must be obtained by the *Contractor*

#### Plant and Materials standards and workmanship

#### Investigation, survey and Site clearance

Refer to the Scope Document Number 348-9946335 section 3.1.3

#### Building works

Refer to the Scope Document Number 348-9946335

#### Civil engineering and structural works

Refer to the Scope Document Number 348-9946335

#### Electrical & mechanical engineering works

Refer to the Scope Document Number 348-9946335

The *Contractor* shall as part of the scope, design and supply the electrical works required for the efficient, safe and cost-effective usage thereof.

Based on the 2 × fume extractor sizes, the *Contractor* will size the power requirement. The

*Contractor*

shall supply all cabling and cable racking including all associated tools and equipment to mount and install the supply cable to the instruments and the switchgear as per the Medupi Power Station

Cabling and Racking Standard 200-11768.

All power supply requirements for the equipment will be supplied by means of an Aux Power Schedule to Eskom for review and acceptance.

#### Process control and IT works

Below is a list of specifications and standards that must be utilised when integrating any C&I instruments and/or philosophy into the design:

#### Type Number Name

Eskom 240-56227443 Requirements for control and power cables for power stations Eskom 240-56355843 Pressure Measurement Systems Installation Standard

Eskom 240-56355815 Junction Boxes and Cable Termination Standard

Eskom 240-56227443 Requirements for control and power cables for power stations Eskom 240-56355535 Process Calibration Equipment Standard

Eskom 240-56355754 Field Instrument Installation Standard Eskom 240-56355466 Alarm Management System

#### Construction Activities

* + 1. **Stormwater Drainage And Terrace And Construction**

The Contractor shall design and construct the stormwater drainage and terrace required to facilitate efficient drainage without any ponding of water. The design shall be based on a 1 in 50 year storm event with a minimum nominal pipe diameter (ND) of 450mm. All stormwater pipes shall be pre-cast concrete pipes with a pipe class of 100D with Spigot & Socket Joint and rubber rings. The Contractor shall ensure that his design integrates with all other services and/or buildings in the immediate vicinity. The Contractor’s design shall take into account as far as reasonably practicable the existing stormwater system and infrastructure in the area. The Works shall include all relevant material required (bedding sand, pipes, selected layers etc) and construction according to an approved design as well as adhering to all relevant specifications and SANS codes including but not limited to SANS 1200.

The Contractor shall construct the tie-ins to the existing clean water drains, access roads and surround infrastructure. The Contractor shall supply and install all relevant required materials and testing to ensure that pre-cast concrete sleeves are installed at an appropriate invert levels.

All storm-water runoff that enters the area described above should be catered for in the design. The current concept design does includes an asphalted access road. Alternative options to asphalt, such as a gravel wearing course, must be considered in the design in light cost saving measures.

The area around between and around the Ash Dump Workshop and Ash Dump Substation requires terracing/shaping. Currently the water is ponding and the contractor will have holistically implement the drainage solution and tie it into the existing clean storm water channels. The design included concrete lined channels and earth lined channels including erosion protection and deviation from this shall be motivated to the employer and cost saving alternatives are encouraged.

Eliminate all potential causes of flooding to the Ash Dump Workshop and Substation with recommendation from the Geotechnical Verification Investigation.

In terms of documentation the *Contractor* will submit method statements and relevant ITPs, reviewed and accepted (signed off) by Design Engineer, for approval before commencement of any construction works. The *Contractor* will obtain an excavation permit before commencement of any type of excavation required for construction. Surveys will be submitted as per the agreed

upon ITPs and provision is to be made for surveys pre, post and during construction by the Contractor to ensure compliance to all specifications and that design intent was achieved.

#### Geotechnical Investigation Verification

A geotechnical investigation has been conducted across the parts of Medupi site, and the results are contained in report 348-913228.

Before construction, a verification investigation shall be performed by the Contractor including a review of report 348-913228 furthered by any testing/samples required to satisfy the onsite conditions and geotechnical information provided to enable suitable design an accountability

The scope of the verification investigation shall be determined by a professionally registered geotechnical engineer or engineering geologist. The verification investigation shall not absolve the Contractor from responsibility for all geotechnical data and interpretation of all data provided.

The verification investigation shall also determine all possible causes of the flooding experienced at the Ash Dump Substation and provide recommendation of remedial works, if any, over and above to the work in section 4.2.1.

#### Construction Constraints and Interfaces

1. The *Contractor* is to be aware of the following existing structures/services as seen on the Employer’s Design Drawings:
   1. Existing clean water drainage infrastructure to the North East.
   2. Existing Building (Transfer House, Ash Dump Workshop, Ash Dump Substation)
   3. Existing Road to the East.
   4. Interfacing with adjacent operations including but not limited to Ash Dump facility, Sub- Station and Workshop and Stores buildings.
   5. Existing above ground and underground services.
2. A construction methodology must be carefully considered for construction activities that take into account all existing infrastructure, visible and non-visible as well as that these buildings are operational. Construction activities and methods must consider keeping these buildings accessible and operational.

#### Contractor Submissions

The *Contractor* is to provide, including but not limited to, the following for review and acceptance by the *Employer*:

1. Design drawings (native and pdf)
2. Design report and calculations
3. A Construction QCP or ITPs. (Arrangements are made timeously with the Employers Engineer to witness and monitor critical elements of the works as defined in the ITP.)
4. Execution Plan and Project Programme
5. Construction Method Statements
6. Material Approvals
7. As Built Surveys to be submitted to the *Employers* Team
8. Material Approvals for each material type. Materials selected for Works shall be pre- approved by the Employers Team
9. Construction data book Index
10. Construction data books accepted by Contractor’s design consultant
11. Profession Engineering certification of the completed works by ECSA registered professional
12. Evidence of approval by Design Engineer or authorised designer representative on construction documents including but not limited to, QCP, ITPs, Material Approvals, Method Statements, Material conformance Test results and progressive survey approval.
13. Monthly progress and inspection reports by the Design Engineer or authorised designer representative

#### List of drawings

* 1. **Drawings issued by the *Employer***

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

The listed drawing shall form part of the Employer's Documents.

#### Table 1: Employer’s Design Drawings

|  |  |  |
| --- | --- | --- |
| **Title** | **Employer’s Drawing No.** | **Rev No.** |
| MEDUPI POWER STATION ASH DUMP ACCESS ROADS AND DRAINAGE LAYOUT | 0.84/7252 SH12 | 03 |
| ASHDUMP WORKSHOP & SUBSTATION (P35) TYPICAL STORMWATER DETAILS HEADWALL DETAILS | 0.84/7243-S23 | 01 |
| ASHDUMP WORKSHOP & SUBSTATION (P35) TYPICAL STORMWATER DETAILS HEADWALL REINFORCEMENT | 0.84/7243-S24 | 01 |
| GENERAL CONSTRUCTION DRAWING TYPICAL CROSS SECTIONS THROUGH PAVING | 0.84/7246-S03 | 09 |
| GENERAL CONSTRUCTION DRAWING KERBING & DETAILS | 0.84/7246-S04 | 10 |
| GENERAL CONSTRUCTION DRAWING KERBING & DETAILS NO.2 | 0.84/7246-S13 | 04 |
| ASH DUMP WORKSHOP GENERAL SEWER LAYOUT | 0.84/7256-S07 | 5 |
| ASH DUMP BUILDING SEWER LONG SECTION | 0.84/7256-S08 | 2 |
| ASH DUMP SUBSTATION POTABLE WATER LAYOUT | 0.84/7258-S09 | 7 |
| ASH DUMP SUBSTATIONS FIRE WATER LAYOUT | 0.84/7258-S15 | 7 |
| TYPICAL STORMWATER DETAILS 3 OF 3 | 0.84/7243-S03 | 5 |
| SSB,WTP,LAB ADMIN ISLAND AND SUBSTATIONS TYPICAL STORMWATER DETAIL 2 | 0.84/7243-S02 | 11 |
| SSB,WTP,LAB ADMIN ISLAND AND SUBSTATIONS TYPICAL STORMWATER DETAIL 1 OF 3 | 0.84/7243-S01 | 5 |
| Medupi FGD Geotechnical Investigation Report | 348-913228 | 1 |

* **DOCUMENTATION**

The following listed documents are included as attachments and shall form part of the Employer's Documents:

**Table 2: Additional Documentation**

|  |  |  |
| --- | --- | --- |
| **Document No.** | **Rev. No.** | **Title** |
| 8CIVL053 | 03 | Medupi Power Station Specification for Structural Concrete |
| 200-1689 | 02 | Medupi Quality Specification |
| 200-46362 | 03 | Site Quality Assurance, Control and verification work instruction |
| 240-77471499 | 02 | Annexure B: Acknowledgement Form for Eskom SHE Rules |
| 200-45965 | 06 | Manufacturing Inspection & Testing Work Instruction |
| 32-245 | 04 | Eskom Waste Management Standard |
| 240-62196227 | 06 | Eskom Life Saving Rules |
| 200-1679 | 04 | Project Quality Plan |
| 200-35208 | 02 | Environmental Management Plan |
| PWI 200 – 5664 | 06 | Engineering Change Management Work Instruction |
| 200-24289 | 02 | (Ssz\_45-17), Medupi Power Station Corrosion Protection Specification |

|  |  |  |
| --- | --- | --- |
| **Document No.** | **Rev. No.** | **Title** |
| 200-1680 | 06 | Document and Record Management Procedure |
| 200-53810 | 02 | Documentation Handover List |
| 200-6166 | 11 | Eskom backfill specification |
| 200-16817 | 05 | Excavation permit |
| 240-57127955 | 03 | Geotechnical and Foundation Engineering Standard |
| 200-94660 | 06 | Issuing of KKS certificate |
| 200-15406 | 03 | Issuing of takeover certificate |
| 200-3340 | 04 | KKS Coding and Labelling |
| 200-18202 | 04 | KKS Key Part Standard |
| 200-5343 | 10 | List of Abbreviations |
| 200-73971 | 06 | Medupi EMS Scope and Manual |
| 200- 162027 | 01 | Record of Decision (ROD) for the Medupi Project ref no.12/12/20/695 |
| 240-85549846 | 02 | Standard for Design of Drainage and Sewerage Infrastructure |
| 200-4190 | 04 | The application of KKS plant coding (NMP 45-7) |
| 240-82410629 | 02 | Environment Management Strategy |

# PART 4: SITE INFORMATION

|  |  |  |
| --- | --- | --- |
| **Document reference** | **Title** | **No of pages** |
| C4 | This cover page Site Information | 1  2 |
|  | Total number of pages |  |

**PART 4: 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. General description

The Medupi Power Station Project in Lephalale is a green-fields coal –fired power plant comprising of six units providing a total of 4800MW on full capacity. The Power Station is situated approximately 20km from the town of Lephalale (Ellisras).It is situated along the Steenbokpan Road. The works takes place in and around the boundaries of Medupi Power Station.

Medupi Power Station is located Y: 56334.69 X: 2622791.55 WGS84.

Medupi Power Station is declared as National Key Point. Access to site shall be in line with the Medupi Power Station’s access procedure. The *Contractor* shall be required to make an application to enter site for the duration of the contract, including the warranty and defect period. A permit shall only be issued once the *Contracto*r and his or her employees have attended the safety induction and has undergone medical checks. The *Contractor* shall have no claim against the *Employer* in respect of delay at the security main gate.

Note that the speed limit on the site is 40 Km/h. The vehicle permits of any persons contravening any traffic act on site shall be cancelled.

The *Contractor* complies with the Medupi Power Site Regulations, a copy of which is available for perusal at the *Project Manager’s* offices.

Eskom Holding SOC Ltd as an entity is a State-Owned Company which is subjected to regulatory compliance as applicable to Government. Medupi Power Station Project Site is designated as a National Key Point in terms of the National Key Point Act 102 of 1980.

Eskom is required to comply with the requirements of paragraph 5 of the Minimum Information Security Standard (MISS) that seeks to implement a criminal check/ screening process which intends to identify individuals whom might through their actions and/ or behaviour, could pose a risk to the operation of Eskom Holdings SOC Ltd.

The Contractor is to ensure that the Contractor’s employees are screened by means of criminal clearance verifications with the South African Police Service (SAPS) Criminal Record Centre (CRC) or accredited supplier linked to SAPS AFIS system and provide proof to Eskom security delegated team before access to site is granted. The Contractor’s new applications for site access are required to produce the SAPS Clearance Certificate.

The screening process aims at ensuring a certain level of protection to the workforce, assets and information in accordance with Minimum Information Security Standard (MISS) of 1996, National Key Point Act 102 of 1980, National Strategic Intelligence Act 39 of 1994 and Protection of Critical Infrastructure Protection Act 8 of 2019.

If the Contractor appoints a subcontractor, the same provisions and measures will apply to the subcontractor.

For the purpose of clarity, Contractor’s who was previously found guilty of offences in terms of the National Road Traffic Act 93 of 1996 and/or has paid guilt admission fines, will be exempted and be allowed to access site.

Acceptance of this tender is subject to the condition that both the contracting company’s management and its employees will provide Eskom with a clear criminal record not older than thirty (30) days from a reputable screening company.

Acceptance of the tender is also subject to the condition that the contractor will implement all such security measures for the safe performance of the work as required in the scope of the contract.

The Contractor makes his/her own assessment of and allows in his/her rates for those access problems that may be encountered. No extra payment or claim of any kind is allowed on account of difficulties of access to the works, or for the requirement of working adjacent to or in the same area as others.

Medupi Power Station is declared as National Key Point. Access to site shall be in line with the Medupi Power Station’s access procedure. The Contractor shall be required to make an application to enter site for the duration of the contract, including the warranty and defect period. A permit shall only be issued once the Contractor and his or her employees have attended the safety induction and has undergone medical checks.

The Contractor shall have no claim against the Employer in respect of delay at the security main gate.



**Ash Dump Existing building**



**Shape of the surrounding buildings**

### 1. Other reports and publicly available information

**Direction of flooding water and low points**