

NEC3 Professional Services Contract (PSC3)

**Contract between NTCSA SOC Ltd
(Reg No. 2021/539129/30)**

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

for The provision of consultancy services for the definition of Synchronous Zones and Optimal Placement of Phasor Measurement Units (PMUs) for Inertia Monitoring and Tracking.

| Contents: | No of pages |
|---|--------------------|
| Part C1 Agreements & Contract Data | [25] |
| Part C2 Pricing Data | [4] |
| Part C3 Scope of Work: The Scope | [13] |

CONTRACT No. [Insert at award stage]

PART C1: AGREEMENTS & CONTRACT DATA

| Document reference | Title | No of pages |
|---------------------------|---|--------------------|
| C1.1 | Form of Offer & Acceptance [to be inserted from Returnable Documents at award stage] | [3] |
| C1.2a | Contract Data provided by the <i>Employer</i> | [12] |
| C1.2b | Contract Data provided by the <i>Consultant</i> [to be inserted from Returnable Documents at award stage] | [2] |
| C1.3 | Securities proforma | [8] |

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:

The provision of consultancy services for the definition of Synchronous Zones and Optimal Placement of Phasor Measurement Units (PMUs) for Inertia Monitoring and Tracking.

The tenderer, identified in the Offer signature block, has

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

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

| | |
|---|-------------------|
| The offered total of the Prices exclusive of VAT is | Rate Based |
| Value Added Tax @ 15% is | Rate Based |
| The offered total of the Prices inclusive of VAT is | Rate Based |
| (in words) Rate Based | |

If Option E or G apply, for each offered total insert in brackets, "(Not Applicable – Cost reimbursable)"

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 *Consultant* 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

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 Consultant 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: The Scope

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

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

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

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

Signature(s)

Name(s)

Capacity

**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

Note:

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

| No. | Subject | Details |
|-----|---------|---------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |

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 <i>(Insert name and address of organisation)</i> Name & signature of witness Date | <i>(Insert name and address of organisation)</i> |
|---|---|

C1.2 PSC3 Contract Data

Part one - Data provided by the *Employer*

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

| Clause | Statement | Data |
|--------|--|---|
| 1 | General | |
| | The <i>conditions of contract</i> are the core clauses and the clauses for main Option | |
| | dispute resolution Option and secondary Options | <p>A: Priced contract with activity schedule</p> <p>W1: Dispute resolution procedure</p> <p>X2 Changes in the law</p> <p>X3: Multiple currencies (If Applicable)</p> <p>X4: Parent company guarantee (Depend on outcome of evaluation)</p> <p>X5: Sectional Completion</p> <p>X10 <i>Employer's Agent</i></p> <p>X11: Termination by the <i>Employer</i></p> <p>X13: Performance bond (Depend on outcome of evaluation)</p> <p>X18: Limitation of liability</p> <p>Z: <i>Additional conditions of contract</i></p> |
| | of the NEC3 Professional Services Contract (April 2013) ¹ | |
| 10.1 | The <i>Employer</i> is (Name): | NTCSA SOC Ltd (reg no: 2021/539129/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa |
| | Address | Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg |
| | Tel No. | TBA |
| | Fax No. | - |

¹ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009 and www.ecs.co.za

| | | |
|----------|---|--|
| 11.2(9) | The <i>services</i> are | Consulting Services for the Definition of Synchronous Zones and Optimal Placement of Phasor Measurement Units (PMUs) for Inertia Monitoring and Tracking |
| 11.2(10) | The following matters will be included in the Risk Register | 1.PMU (Phasor Measurement Unit) and load data may be incomplete, noisy, or unavailable for certain grid areas. 2.Cost Overruns or Timeline Delays |
| 11.2(11) | The Scope is in | Part 3: Scope of Work |
| 12.2 | The <i>law of the contract</i> is the law of | the Republic of South Africa |
| 13.1 | The <i>language of this contract</i> is | English |
| 13.3 | The <i>period for reply</i> is | 1 weeks |
| 13.6 | The <i>period for retention</i> is | 24 months following Completion or earlier termination. |

2 The Parties' main responsibilities

| | | | |
|------|---|------------------|--------------------|
| 25.2 | The <i>Employer</i> provides access to the following persons, places and things | access to | access date |
| | | 1 [N/A] | N/A] |
| | | 2 [N/A] | [N/A] |
| | | 3 [N/A] | [N/A] |

3 Time

| | | | |
|---------|--|--|-----------------|
| 31.2 | The <i>starting date</i> is. | TBA | |
| 11.2(3) | The <i>completion date</i> for the whole of the <i>services</i> is. | 12 Months from when contract starts | |
| 11.2(6) | The <i>key dates</i> and the <i>conditions</i> to be met are: | Condition to be met | key date |
| | | 1 [Milestones to be inserted] | [TBA] |
| | | 2 [Milestones to be inserted] | [TBA] |
| | | 3 [Milestones to be inserted] | [TBA] |
| 31.1 | The <i>Consultant</i> is to submit a first programme for acceptance within | 2 weeks of the Contract Date. | |
| 32.2 | The <i>Consultant</i> submits revised programmes at intervals no longer than | 4 weeks. | |

4 Quality

| | | |
|------|---|---|
| 40.2 | The quality policy statement and quality plan are provided within | 3 weeks of the Contract Date. |
| 42.2 | The <i>defects date</i> is | 4 weeks after Completion of the whole of the services. |

| 5 | Payment | | | | | | | | | | | |
|----------|---|--|------|--------|-----|-----|-----|-----|-----|-----|-----|-----|
| 50.1 | The <i>assessment interval</i> is | the 25th day of each successive month. | | | | | | | | | | |
| 50.3 | The <i>expenses</i> stated by the <i>Employer</i> are | <table border="1"> <thead> <tr> <th>Item</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>TBA</td> <td>TBA</td> </tr> <tr> <td>TBA</td> <td>TBA</td> </tr> <tr> <td>TBA</td> <td>TBA</td> </tr> <tr> <td>TBA</td> <td>TBA</td> </tr> </tbody> </table> | Item | Amount | TBA | TBA | TBA | TBA | TBA | TBA | TBA | TBA |
| Item | Amount | | | | | | | | | | | |
| TBA | TBA | | | | | | | | | | | |
| TBA | TBA | | | | | | | | | | | |
| TBA | TBA | | | | | | | | | | | |
| TBA | TBA | | | | | | | | | | | |
| 51.1 | The period within which payments are made is | 30 Days | | | | | | | | | | |
| 51.2 | The <i>currency of this contract</i> is the | South African Rand Foreign currency (if applicable) | | | | | | | | | | |
| 51.5 | The <i>interest rate</i> is | <p>the publicly quoted prime rate of interest charged by [●] Standard Bank of South Africa Limited at the time an amount payable in SA Rand was due,</p> <p>and</p> <p>the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption “Money Rates” in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove</p> | | | | | | | | | | |
| 6 | Compensation events | There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data. | | | | | | | | | | |
| 7 | Rights to material | There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data. | | | | | | | | | | |
| 8 | Indemnity, insurance and liability | 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. | | | | | | | | | | |

| | | |
|-------------|---|--|
| 82.1 | The <i>Consultant's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than the excluded matters, is limited to | The total of the Prices |
| 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 | |
| 21.3 | The <i>Consultant</i> prepares forecasts of the total <i>expenses</i> at intervals of no longer than | 4 weeks. |
| 11 | Data for Option W1 | |
| W1.1 | The <i>Adjudicator</i> is | the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA). |
| | Address | [TBA] |
| | Tel No. | [TBA] |
| | Fax No. | [TBA] |
| | e-mail | [TBA] |
| W1.2(3) | The <i>adjudicator nominating body</i> is: | the Chairman of the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering. (See www.ice-sa.org.za). |
| W1.4(2) | The <i>tribunal</i> is: | arbitration |
| W1.4(5) | The <i>arbitration procedure</i> is | the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body. |
| | The place where arbitration is to be held is | Johannesburg, South Africa |
| | The person or organisation who will choose an arbitrator | |
| | <ul style="list-style-type: none"> • if the Parties cannot agree a choice or • if the <i>arbitration procedure</i> does not state who selects an arbitrator, is | the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body. |
| 12 | Data for secondary Option clauses | |
| X2 | Changes in the law | |

| | | | | |
|------------|---|---|-----------------------|--|
| X2.1 | The law of the project is | Republic of South Africa | | |
| X3 | Multiple currencies | South African Rand | | |
| X3.1 | The <i>Employer</i> will pay for these items or activities in the currencies stated | Items & activities | Other currency | Maximum payment in other currency |
| | | [TBA] | [TBA] | [TBA] |
| | | [TBA] | [TBA] | [TBA] |
| | | [TBA] | [TBA] | [TBA] |
| X3.1 | The <i>exchange rates</i> are those published in | See Annexure G, Part 2 | | |
| | | <p>The items & activities will be paid in the other currency</p> <ul style="list-style-type: none"> - to a foreign Bank account nominated by the <i>Consultant</i> - to a valid SARB approved CFC account in South Africa - in accordance with an alternative payment method agreed with the <i>Employer</i> before the Contract Date. <p>(select one of the three methods as agreed with successful tenderer and delete the others and this note)</p> | | |
| X4 | Parent company guarantee | There is no reference to Contract Data in this Option and terms in italics used in this Option are identified elsewhere in this Contract Data. | | |
| X5 | Sectional Completion | | | |
| X5.1 | The <i>completion date</i> for each <i>section</i> of the <i>services</i> is: | section | description | completion date |
| | | 1 | [As per Milestones] | [As per Milestones] |
| | | 2 | [As per Milestones] | [As per Milestones] |
| | | 3 | [As per Milestones] | [As per Milestones] |
| X10 | The <i>Employer's Agent</i> | | | |
| X10.1 | The <i>Employer's Agent</i> is | | | |
| | Name: | [TBA] | | |
| | Address | [TBA] | | |
| | The authority of the <i>Employer's Agent</i> is | [TBA] | | |
| X11 | Termination by the <i>Employer</i> | There is no reference to Contract Data in this Option and terms in italics used in this Option are identified elsewhere in this Contract Data. | | |
| X13 | Performance bond | | | |

| | | |
|------------|--|---|
| X13.1 | The amount of the performance bond is | R[●]. |
| X18 | Limitation of liability | |
| X18.1 | The <i>Consultant's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to: | R0.00 (Zero Rand) |
| X18.2 | The <i>Consultant's</i> liability to the <i>Employer</i> for Defects that are not found until after the <i>defects date</i> is limited to: | The total of the Prices |
| X18.3 | The <i>end of liability date</i> is | five years after Completion of the whole of the services/task order. |
| Z | The Additional conditions of contract are | |
| | | Z1 to Z14 always apply. |

Z1 Cession delegation and assignment

- Z1.1 The *Consultant* 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 *Consultant* 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 *Consultant* 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 *Employer* within two weeks of the Contract Date of the key person who has the authority to bind the *Consultant* on their behalf.
- Z2.3 The *Consultant* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Consultant* in writing.

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

- Z3.1 Where a change in the *Consultant's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Consultant's* B-BBEE status, the *Consultant* notifies the *Employer* within seven days of the change.
- Z3.2 The *Consultant* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.
- Z3.3 Where, as a result, the *Consultant's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Consultant's* obligation to Provide the Services.

- Z3.4 Failure by the *Consultant* 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 those stated in core clause 91. The payment on termination includes a deduction of the forecast of the additional cost to the *Employer* of completing the whole of the *services* in addition to the amounts due in terms of core clause 92.1.

Z4 Confidentiality

- Z4.1 The *Consultant* 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 *Consultant*, enters the public domain or to information which was already in the possession of the *Consultant* at the time of disclosure (evidenced by written records in existence at that time). Should the *Consultant* disclose information to Others in terms of clause 23.1, the *Consultant* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Consultant* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Employer*.
- Z4.3 In the event that the *Consultant* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Consultant*, 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 *Consultant* 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 *Employer's* project works or any portion thereof, in the course of Providing the Services and after Completion, requires the prior written consent of the *Employer*. All rights in and to all such images vests exclusively in the *Employer*.

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, or the *Adjudicator* does not constitute a waiver of rights and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Provision of a Tax Invoice. Add to core clause 51

- Z6.1 The *Consultant* (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 4710303126 on each invoice he submits for payment.

Z7 Notifying compensation events

- Z7.1 Delete from the last sentence in core clause 61.3, "unless the *Employer* should have notified the event to the *Consultant* but did not".

Z8 Employer's limitation of liability

- Z8.1 The *Employer's* liability to the *Consultant* for the *Consultant's* indirect or consequential loss is limited to R0.00 (zero Rand)

Z9 Termination: Add to core clause 90.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

Z9.1 or had a business rescue order granted against it.

Z10 Delay damages: Addition to secondary Option X7 Delay damages (if applicable in this contract)

Z10.1 If the *Consultant'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 *Consultant's* obligation to Provide the Services.

Z10.2 If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in core clause 91. The payment on termination includes a deduction of the forecast of the additional cost to the *Employer* of completing the whole of the *services* in addition to the amounts due in terms of core clause 92.1.

Z11 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 *Consultant* or a third party, such party's employees, agents, or Subconsultants or Subconsultant'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 *Consultant*, or any member thereof in the case of a joint venture, or its employees, agents, or Subconsultants or the Subconsultant'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, 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.

Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z11.2 The *Employer* may terminate the *Consultant's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Consultant* 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 *Consultant's* obligation to Provide the Services for this reason.

Z11.3 If the *Employer* terminates the *Consultant'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.

Z11.4 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 *Consultant* ensures that the Committing Party co-operates fully with an investigation.

Z12 Insurance

Z12.1 Replace core clause 81 with the following:

81.1 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.

81.2 The *Consultant* provides the insurances stated in the Insurance Table A 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 | For the period following Completion of the whole of the services or earlier termination |
|--|--|---|
| Liability of the <i>Consultant</i> for claims made against him arising out of his failure to use the skill and care normally used by professionals providing services similar to the <i>services</i> | R 12 000 000 | 24 Months |
| Liability for death of or bodily injury to a person (not an employee of the <i>Consultant</i>) or loss of or damage to property resulting from an action or failure to take action by the <i>Consultant</i> | <p><u>Loss of or damage to property:</u> The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible, as at Contract Date, where covered by the <i>Employer's</i> insurance</p> <p><u>Bodily injury to or death of a person:</u> The amount required by the applicable law.</p> | 24 Months |
| Liability for death of or bodily injury to employees of the <i>Consultant</i> arising out of and in the course of their employment in connection with this contract | The amount required by the applicable law | 24 Months |

81.3 The *Employer* provides the insurance stated in the Insurance Table B.

INSURANCE TABLE B

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

Z13 Nuclear Liability

- Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.
- Z13.2 The *Employer* is solely responsible for and indemnifies the *Consultant* or any other person against any and all liabilities which the *Consultant* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Consultant* or any other person or the presence of the *Consultant* or that person or any property of the *Consultant* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Consultant* or any other person, or the presence of the *Consultant* or that person or any property of the *Consultant* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z14 Asbestos

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

AAIA means approved asbestos inspection authority.

ACM means asbestos containing materials.

| | |
|------------------------------|--|
| AL | means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL. |
| Ambient Air | means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet. |
| Compliance 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 <i>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.</i> |
| SANAS | means the South African National Accreditation System. |
| TWA | means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA. |

- Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Consultant* 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.
- Z14.2 Upon written request by the *Consultant*, 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 *Consultant* may perform Parallel Measurements and related control measures at the *Consultant's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Consultant's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the

emergency asbestos work plan, if applicable.

- Z14.6 The *Consultant* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

C1.2 Contract Data

Part two - Data provided by the *Consultant*

[Instructions to the tendering consultant: (delete these notes in the final draft of a contract)]

1. The tendering consultant is advised to read both the NEC3 Professional Services Contract, April 2013 and the relevant parts of its Guidance Notes (PSC3-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 158 & 159 of the PSC3 April 2013 Guidance Notes.
2. The number of the clause in the PSC3 which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Whenever a cell is shaded in the left hand column it denotes this data is optional in PSC3 and would be required in relation to the option selected. The *Employer* should already have made the selection and deleted the rows not required.

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

| Clause | Statement | Data |
|------------------|---|--|
| 10.1 | The <i>Consultant</i> is (Name): Address Tel No. Fax No. | |
| 22.1 | The <i>key people</i> are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities: Qualifications: Experience: | |
| Only if required | | CV's (and further <i>key persons</i> data including CVs) are appended to Tender Schedule entitled . |
| 11.2(3) | The <i>completion date</i> for the whole of the <i>services</i> is | |

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

| | | | |
|----------|---|-------------------------|----------------------------------|
| 11.2(10) | The following matters will be included in the Risk Register | | |
| 11.2(13) | The <i>staff rates</i> are: | name/designation | rate |
| | Either complete here or cross refer to a schedule in Part C2.2 | | |
| 25.2 | The <i>Employer</i> provides access to the following persons, places and things | access to | access date |
| | | 1 | |
| | | 2 | |
| | | 3 | |
| 31.1 | The programme identified in the Contract Data is | | |
| 50.3 | The <i>expenses</i> stated by the <i>Consultant</i> are | item | amount |
| A | Priced contract with activity schedule | | |
| 11.2(14) | The <i>activity schedule</i> is in | | |
| 11.2(18) | The tendered total of the Prices is | R | (in figures) |
| | | | (in words), excluding VAT |

C1.3 Forms of Securities

Pro formas for Bonds & Guarantees

For use with the NEC3 Professional Services Contract

[Note to contract compiler:

Once it has been decided which securities are required for this contract delete from this file the ones not required, revise the notes below accordingly and delete this note.]

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

Option X4: Parent company guarantee

Option X13: Performance Bond

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

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

[Note to contract compiler: If there are no ASGI-SA Obligations in this contract, delete the above statement]

The organisation 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 Parent Company Guarantee (for use with Option X4)

(to be reproduced exactly as shown below on the letterhead of the Consultant's Parent Company)

**NTCSA SOC Ltd
Megawatt Park
Maxwell Drive
Sandton
Johannesburg**

Date:

Dear Sirs,

Parent Company Guarantee for Contract No

With reference to the above numbered contract made or to be made between

NTCSA SOC Ltd

(the *Employer*) and

{Insert registered name and address of the *Consultant*}

(the *Consultant*), for

{Insert details of the services from the Contract Data}

(the *services*).

I/We the undersigned

on behalf of the *Consultant's*
parent company

of physical address

and duly authorised thereto do hereby unconditionally guarantee to the *Employer* that the *Consultant* shall Provide the Services in accordance with the above numbered Contract.

1. If for any reason the *Consultant* fails to Provide the Services, we hereby agree to cause to Provide the Services at no additional cost to the *Employer*.
2. If we fail to comply with the terms of this Deed of Guarantee, the *Employer* may itself procure such performance (whether or not the Agreement be formally determined). The *Employer* is to notify us and we shall indemnify the *Employer* for any additional cost or expense it incurs.
3. Our liability shall be as primary obligor and not merely as surety and shall not be impaired or discharged by reason of any arrangement or change in relationship made between the *Consultant* and the *Employer* and/or between us and *Consultant*; nor any alteration in the obligations undertaken by the *Consultant* or in the terms of the Agreement; nor any indulgence, failure, delay by you as to any matter; nor any dissolution or liquidation or such other analogous event of the *Consultant*.
4. The *Employer* shall not be obliged before taking steps to enforce the terms of this Deed of Guarantee to obtain judgement against the *Consultant* in any court or other tribunal, to make or file any claim in liquidation (or analogous proceedings) or to seek any remedy or proceed first against the *Consultant*.
5. This Deed of Guarantee shall be governed by and construed in accordance with the laws of the Republic of South Africa and we hereby submit to the non-exclusive jurisdiction of the Supreme Court of South Africa.

The provision of consultancy services for the definition of Synchronous Zones and Optimal Placement of Phasor Measurement Units (PMUs) for Inertia Monitoring and Tracking.

Signed at _____ on this _____ day of _____ 200_

Signature(s)

Name(s) (printed)

Position in parent company

Signature of Witness(s)

Name(s) (printed)

| | |
|--|--|
| | |
| | |
| | |
| | |
| | |
| | |

Pro forma Performance Bond – Demand Guarantee (for use with Option X13)*(to be reproduced exactly as shown below on the letterhead of the Consultant's Parent Company)*

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

1. In this Guarantee the following words and expressions shall have the following meanings:-
 - 1.1 “Bank” - means [●], [●] Branch, (Registration No. [●]); *[Drafting Note: Name of Bank to be inserted]*
 - 1.2 “Bank’s Address” - means [●]; *[Drafting Note: Bank’s physical address to be inserted]*
 - 1.3 “Contract” – means the written agreement relating to the Services, entered into between NTCSA and the Consultant, 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]*
 - 1.4 “Consultant” – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. *[Drafting Note: Name and details of Consultant to be inserted]*
 - 1.5 “NTCSA” - means National Transmission Company South Africa SOC Ltd, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2021/539129/30].
 - 1.6 “Expiry Date” - means the earlier of
 - the date that the Bank receives a notice from NTCSA stating that all amounts due from the Consultant as certified in terms of the contract have been received by NTCSA and that the Consultant has fulfilled all his obligations under the Contract, or
 - the date that the Bank issues a replacement Bond for such lesser or higher amount as may be required by NTCSA
 - 1.7 “Guaranteed Sum” - means the sum of R [●] ([●] Rand);
 - 1.8 “Services” - means [insert if applicable.].
2. At the instance of the Consultant, 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 NTCSA, as security for the proper performance by the Consultant of all of its obligations in terms of and arising from the Contract and hereby undertake to pay to NTCSA, on written demand from NTCSA received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.
3. A demand for payment under this guarantee shall be made in writing at the Bank’s address and shall:

- 3.1 be signed on behalf of NTCSA by a Group Executive, Divisional Executive, Senior General Manager, General Manager or its delegate;
- 3.2 state the amount claimed ("the Demand Amount");
- 3.3 state that the Demand Amount is payable to NTCSA in the circumstances contemplated in the Contract.
4. 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:
- 4.1 is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
- 4.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
5. The Bank's obligations in terms of this Guarantee:
- 5.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
- 5.2 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 NTCSA and the Consultant.
6. NTCSA shall be entitled to arrange its affairs with the Consultant 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 Consultant or any variation under or to the Contract.
7. Should NTCSA cede its rights against the Consultant to a third party where such cession is permitted under the Contract, then NTCSA shall be entitled to cede to such third party the rights of NTCSA under this Guarantee on written notification to the Bank of such cession.
8. This Guarantee:
- 8.1 shall expire on the Expiry Date until which time it is irrevocable;
- 8.2 is, save as provided for in 7 above, personal to NTCSA and is neither negotiable nor transferable;
- 8.3 shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
- 8.4 shall be regarded as a liquid document for the purpose of obtaining a court order; and
- 8.5 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.
- 8.6 Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
9. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at _____

Date _____

The provision of consultancy services for the definition of Synchronous Zones and Optimal Placement of Phasor Measurement Units (PMUs) for Inertia Monitoring and Tracking.

For and behalf of the Bank

Bank Signatory: _____

Bank Signatory: _____

Witness: _____

Witness: _____

Bank's seal or stamp

Pro forma ASGI-SA Guarantee

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

**NTCSA SOC Ltd
Megawatt Park
Maxwell Drive
Sandton
Johannesburg**

Date:

Dear Sirs

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

Pro-Forma ASGI-SA Guarantee: [Drafting Note: Name of Consultant to be inserted]

Project [] Contract Reference: [●] [Drafting Note: Consultant contract reference number to be inserted]

1. In this Guarantee the following words and expressions shall have the following meanings:-
 - 1.1 "Bank" - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]
 - 1.2 "Bank's Address" - means [●]; [Drafting Note: Bank's physical address to be inserted]
 - 1.3 "Contract" – means the written agreement relating to the Project, entered into between the *Employer* and the *Consultant*, 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]
 - 1.4 "*Consultant*" – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of *Consultant* to be inserted]
 - 1.5 "*Consultant's ASGI-SA Obligations*" – means the *Consultant's ASGI-SA Obligations* under and as defined in the Contract.
 - 1.6 "*Employer*" - means NTCSA SOC Ltd, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2021/539129/30.
 - 1.7 "Expiry Date" - means the [●] day of [●] 200[●]; [Drafting Note: anticipated date of issue of ASGI-SA Performance Certificate to be inserted.]
 - 1.8 "Guaranteed Sum" - means the sum of R [●] ([●] Rand);
 - 1.9 "Project" – means the
2. At the instance of the *Consultant*, 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 the *Employer*, as security for the proper performance by the *Consultant* of the *Consultant's ASGI-SA Obligations* and hereby undertake to pay to the *Employer*, on written demand from the *Employer* received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.
3. A demand for payment under this guarantee shall be made in writing at the Bank's address and shall:
 - 3.1 state the amount claimed ("the Demand Amount");
 - 3.2 state that the Demand Amount is payable to the *Employer* in the circumstances contemplated in the Contract.

The provision of consultancy services for the definition of Synchronous Zones and Optimal Placement of Phasor Measurement Units (PMUs) for Inertia Monitoring and Tracking.

- 4. 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:
 - 4.1 is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
 - 4.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
- 5. The Bank's obligations in terms of this Guarantee:
 - 5.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
 - 5.2 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 the *Employer* and the *Consultant*.
- 6. The *Employer* shall be entitled to arrange its affairs with the *Consultant* 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 *Consultant* or any variation under or to the Contract.
- 7. Should the *Employer* cede its rights against the *Consultant* to a third party where such cession is permitted under the Contract, then the *Employer* shall be entitled to cede to such third party the rights of the *Employer* under this Guarantee on written notification to the Bank of such cession.
- 8. This Guarantee:
 - 8.1 shall expire on the Expiry Date until which time it is irrevocable;
 - 8.2 is, save as provided for in 7 above, personal to the *Employer* and is neither negotiable nor transferable;
 - 8.3 shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
 - 8.4 shall be regarded as a liquid document for the purpose of obtaining a court order; and
 - 8.5 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.
 - 8.6 Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
- 9. 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: _____ Witness: _____

Bank's seal or stamp

PART 2: PRICING DATA

PSC3 Option A

| Document reference | Title | No of pages |
|---------------------------|-------------------------------|--------------------|
| C2.1 | Pricing assumptions: Option A | [2] |
| C2.2 | The <i>activity schedule</i> | [1] |

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

Option A is a lump sum form of contract where the work to be done is broken down into well defined activities each listed in the *activity schedule* and priced by the tendering consultant as a lump sum. (See clause 11.2(18)).

Only completed activities which are without Defects are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date. (See clause 11.2(15)).

The *activity schedule* may change after the Contract Date as a result of compensation events. (See clause 11.2(14)).

Function of the Activity Schedule

The Activity Schedule is only a pricing document. Clause 53.1 in Option A states: "Information in the Activity Schedule is not Scope". Specifications and descriptions of the service or any constraints on how it is to be done are included in the Scope and per Clause 21.1, "The *Consultant* Provides the Services in accordance with the Scope" and therefore not in accordance with the Activity Schedule.

Link to the programme

Clause 31.4 states that "The *Consultant* 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 consultant will develop a high level programme first then resource each activity on the programme and thus arrive at the lump sum price for that activity both of which can be entered into the *activity schedule*.

Preparing the activity schedule

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

The description of each activity must be sufficient to determine exactly what work is included within it and to know when it has been completed.

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

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

- Has taken account of the guidance given in the PSC3 Guidance Notes;
- 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 each programme which he submits for acceptance by the *Employer*;
- Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Scope, as it was at the Contract Date, as well as correct Defects except correcting a Defect for which the *Consultant* is not liable;
- 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 *service* 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 *Consultant* estimated at time of tender. The only basis for a change to the Prices is as a result of a

compensation event.

However, the *Consultant* does not have to allow in his Prices for matters that may arise as a result of a compensation event.

Expenses

Expenses are not included in the *activity schedule* items and are assessed separately at each assessment date, unless an additional condition of contract (Z clause) is included which requires that expenses be included within activity Prices and not paid separately.

Expenses associated with employing a staff member in Providing the Services are listed separately either by the *Employer* in Contract Data provided by the *Employer* or by the *Consultant* in Contract Data provided by the *Consultant*. As only the *expenses* listed may be claimed by the *Consultant*, all other cost to the *Consultant* associated with Providing the Services must be included within the activity schedule prices or *staff rates*.

Rate adjustment for inflation of *expenses* is explained in the PSC3 Guidance Notes.

Staff rates

When a compensation event occurs changes to the affected Activity Schedule item or new priced items in the Activity Schedule are assessed as the actual Time Charge for work already done and the forecast Time Charge for work not yet done. (See clause 63.1 and 63.14 in Option A)

The Time Charge is the sum of the products of each of the *staff rates* multiplied by the total staff time appropriate to that rate properly spent on work in this contract. (Clause 11.2(13))

Tendering consultants are advised to consult the NEC3 Professional Services Contract Guidance Notes and Flow Charts before entering *staff rates* into Contract Data, or in C2.2 below.

This is because *staff rates* can be established in one of three ways:

- rates for named staff,
- rates for categories of staff or
- rates related to salaries paid to staff.

Rate adjustment for inflation, if necessary, can be based either on actual salary adjustments or by using Option X1: Price adjustment for inflation. See pages 13 and 14 in the PSC3 Guidance Notes.

C2.2 the *activity schedule*

Refer to Pricing Schedule for Synchronous zone (excel sheet).

This section can be used when the *staff rates* and *expenses* are considerable in number and more conveniently located here than in the Contract Data. Entries in the Contract Data should refer to this section of Part 2.

Remember to state whether the *staff rates* and *expenses* exclude or include VAT.

General Expenses:

Travel Expenses: Travel time is not claimable.

Air and Other Travel (Local): Actuals payable on receipt of actual cost (economy class only. Refer to Eskom Standard Travel and Subsistence guidelines).

Car Hire: Actuals payable on receipt of voucher, invoices and receipts for fuel costs. (Eskom recommended tier/economy class only).

Accommodation and Meals: Actuals payable on receipt of voucher, invoices and receipts.

PART 3: SCOPE OF WORK

| Document reference | Title | No of pages |
|--------------------|---------------------------|-------------|
| | This cover page | 1 |
| C3.1 | <i>Employer's Scope</i> | 13 |
| C3.2 | <i>Consultant's Scope</i> | |
| | Total number of pages | 14 |

C3.1: EMPLOYER'S SCOPE

Contents

| | |
|--|-----------|
| Part 3: Scope of Work | 5 |
| C3.1: Employer's scope | 6 |
| 1 Description of the services | 8 |
| 1.1 Executive overview | 8 |
| 1.2 Interpretation and terminology | 8 |
| 2 Specification and description of the services | 8 |
| 2.1 Stage 1 Preparation | 10 |
| 2.2 Stage 2 Concept | 10 |
| 2.3 Stage 3: Design development | 10 |
| 2.4 Stage 4: Production information | 10 |
| 2.5 Stage 5: Manufacture, Installation and Construction Information: | 10 |
| 2.6 Stage 6: Post Practical Completion | 10 |
| 3 Constraints on how the Consultant Provides the Services. | 10 |
| 3.1 Management meetings | 10 |
| 3.2 Consultant's key persons | 10 |
| 3.3 Provision of bonds and guarantees | 11 |
| 3.4 Documentation control and retention | 11 |
| 3.4.1 Identification and communication | 11 |
| 3.4.2 Retention of documents | 11 |
| 3.5 Records and forecasting of expenses | 11 |
| 3.6 Records and forecasting of the Time Charge | 11 |
| 3.7 Invoicing and payment | 11 |
| 3.8 Contract change management | 13 |
| 3.9 Inclusions in the programme | 13 |
| 3.10 Quality management | 13 |
| 3.10.1 System requirements | 13 |
| 3.10.2 Information in the quality plan | 13 |
| 3.11 The Parties use of material provided by the Consultant | 14 |
| 3.11.1 Employer's purpose for the material | 14 |
| 3.11.2 Restrictions on the Consultant's use of the material for other work | 14 |
| 3.11.3 Transfer of rights if Option X 9 applies | 14 |
| 3.12 Management of work done by Task Order | 14 |
| 3.13 Health and safety | 14 |
| 3.14 Procurement | 14 |

3.14.1 BBBEE and preferencing scheme 14

3.14.2 Other constraints..... 16

3.14.3 Preferred subconsultants 16

3.14.4 Subcontract documentation, and assessment of subcontract tenders..... 16

3.14.5 Limitations on subcontracting 17

3.14.6 Attendance on Subconsultants 17

3.15 Correction of Defects 17

3.16 Working on the *Employer's* property 17

 3.16.1 *Employer's* entry and security control, permits, and site regulations..... 17

 3.16.2 People restrictions, hours of work, conduct and records..... 17

3.17 Cooperating with and obtaining acceptance of Others 17

3.18 Things provided by the *Employer* 17

3.19 Cataloguing requirements by the *Consultant* 17

4 List of drawings..... 18

 4.1 Drawings issued by the *Employer* 18

Description of the *services*

Executive overview

Consulting Services for the Definition of Synchronous Zones and Optimal Placement of Phasor Measurement Units (PMUs) for Inertia Monitoring and Tracking.

Interpretation and terminology

Not Applicable

Specification and description of the *services*

1.1 Inception and Data Gathering

- Stakeholder Consultation: Meet with NTCSA' relevant stakeholders to confirm data availability and refine project requirements.
- Data Collection: Gather network models, real-time/archived operational data, historical disturbance data, existing PMU coverage, and relevant forecasts (Transmission Development Plan, planned generation fleet changes, etc.).

1.2 Grid Synchronous Zones Definition

- Methodology Development: Propose a rigorous methodology to identify or define synchronous zones. This may involve:
 - Modal analysis of the network.
 - Phase angle and frequency response studies.
 - Coherency grouping based on generator and load dynamic behaviour.
- Preliminary Zoning: Use dynamic simulations or disturbance-based studies (where available) to identify and outline potential coherent groups or boundaries.
- Refinement and Validation: Finalize zone boundaries through iterative analysis, ensuring accuracy and alignment with operational realities (e.g. known constraints, substation interconnections, network expansions).

1.3 PMU Placement Study

- Optimal Placement Criteria: Define criteria (technical, economic, operational) for optimal PMU placement in each synchronous zone, considering:
 - Modal analysis of the network.
 - Monitoring of critical tie-lines (inter-zonal power flow).
 - Redundancy needs for critical nodes.
- Modelling and Analysis: Conduct system studies or algorithm-based optimization to identify critical substations and feeders for PMU installation.

- Cost-Benefit Analysis: Assess the financial implications of adding/removing/relocating PMUs to achieve best coverage and reliability.

1.4 Simulation and Validation

- Utilize power system modelling tools (e.g., PSS/E, DigSilent PowerFactory, RTDS) to simulate various PMU placement configurations.
- Validate the proposed PMU locations through detailed case studies and sensitivity analyses.

1.5 Reporting and Recommendations

- Technical Report: Comprehensive documentation of the methodology, results, zone definitions, PMU placement strategies, and recommended timeline for implementing new PMUs.
- Integration Roadmap: Guidance on how to integrate zone-based monitoring into the TPSCM project and the existing inertia prototype tool.
- Workshops: Conduct at least two workshops/training sessions for NTCSA stakeholders to explain the findings, methodology, and recommended next steps.

1.6 Recommendations for Future Inertia Mitigation

- Provide strategic recommendations on additional infrastructure investments, such as synchronous condensers, grid-forming inverters, and battery energy storage systems (BESS) for inertia support.
- Develop a roadmap for future enhancements in inertia monitoring, tracking, and mitigation strategies.

1.7 Exclusions

The scope excludes the actual procurement and physical installation of PMUs or the direct modification of existing SCADA/WAMS. This project focuses on analytical definition of zones and planning/strategy for PMU placements.

Stage 1 Preparation

Not Applicable.

Stage 2 Concept

Not Applicable.

Stage 3: Design development

Not Applicable.

Stage 4: Production information

Not Applicable.

Stage 5: Manufacture, Installation and Construction Information:

Not Applicable.

Stage 6: Post Practical Completion

Not Applicable.

Constraints on how the *Consultant* Provides the Services.

Management meetings

Monthly meetings to be held on Teams as well as physical meetings when required.

Regular meetings of a general nature may be convened and chaired by the *Employer’s Agent* as follows:

| Title and purpose | Approximate time & interval | Location | Attendance by: |
|--|------------------------------|----------|--|
| Risk register and compensation events | Weekly on ___TBA___ at _TBA_ | [TBA] | [TBA] |
| Overall contract progress and feedback | Monthly on __TBA__ at __TBA_ | [TBA] | <i>Employer’s Agent , Consultant and [TBA]__</i> |
| | | | |
| | | | |

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

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

Consultant’s key persons

To be advised at tender stage.

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

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

Documentation control and retention

Identification and communication

All contractual communications will be in the form of properly compiled letters or forms attached to e mails and not as a message in the e mail itself. The communication will be from PM and Consultant and from Consultant to PM.

Retention of documents

All copies of drawings and specifications, reports and other documents will be kept in hard copy and electronically.

Records and forecasting of expenses

Not Applicable.

Records and forecasting of the Time Charge

Not Applicable

Invoicing and payment

Clause 50.2 states invoices submitted by the *Consultant* include the details stated in the Scope to show how the amount due has been assessed. Also state what must be shown on the Invoice. The following text is suggested.

The following details shall be shown on or attached to each Invoice to show how the amount due has been assessed:

The *Consultant* shall address the tax invoice to Project Manager and include on it the following information:

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 include on each invoice the following information:

- Name and address of the Contractor and the Employer's Agent
- The contract number and title.
- Contractor's VAT registration number.
- The Employer's VAT registration number 4710303126.
- The consultant/Contractor/ Service Provider's VAT Registration Number
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT.
- Electronic submission of invoices via email

An original invoice must be sent to the Accounts Payable Department and a copy to the Employer's Agent.

Details on how to submit invoices and additional information:

- NTCSA order number must be clearly indicated on the invoice with the line number on the order for billing.
- Only PDF invoices must be submitted.
- Each PDF file should contain one invoice, one debit, and credit note only as Eskom's SAP system does not support more than one PDF being linked into workflow at a time.
- Only one PDF file per email (one invoice or debit note or credit note).
- Send all invoices in PDF straight from your system to an NTCSA email address (see the email address below).
- When it comes to foreign invoices, suppliers will be required to physical deliver the hard copies of original documents to the respective documentation management centers – though invoices emailed. Eskom is still seeking clarity from the South African Reserve Bank for foreign invoices and currency. Current requirements are that these manual invoices should be submitted. Invoice copy can be sent to the email address indicated below.
- All submitted invoices electronically must comply with the Tax Requirements.
- If there is a Cost Price Adjustment on the invoice, Eskom recommends separate invoice for CPA to avoid delays on payment, if there are issues for the CPA.
- Introduction of electronic invoicing does not guarantee payment but will ensure visibility of all invoices and ensure that no invoices get lost. If the goods receipt is not done, the invoice will be parked, and the system will automatically send an email to the end user to do good receipt. This is also tracked by Eskom through the park invoice report.
- The Contractor can request a park invoice report from the Finance Shared Services (FSS) contact centre which can then be followed up and corrected.
- The Contractor is welcome to forward the details of invoices corrected to the FSS contact centre.
 - All invoices for payment must be submitted Invoicesntcsalocal@ntcsa.co.za

The Contractor shall address the tax invoice to

National Transmission Company South Africa SOC Ltd
 P O Box 1091
 Johannesburg
 2000

FOREIGN INVOICES

The foreign invoice should be sent together with relevant shipping documents and the Contractor shall ensure that the commercial invoice has not been used previously and therefore funds are not exhausted. The shipping documentation is as follows:

1. Tax invoice
2. Commercial invoice
3. SARS Release notification
4. SAD 500
5. Custom worksheet
6. Bill of lading.

If the Contractor does not furnish the supporting documents, the payment cannot be made, and the Contractor will be charged the cost of moving the Forward Exchange Cover (FEC) that Eskom has incurred in managing the risk of currency movement.

Tax Requirement

- A PDF file that was created directly from a system meets the definition of original document and is allowed (including saving documents from excel to PDF, word to PDF etc.)
- An Invoice that was printed and then scanned to PDF by the Vendor is not acceptable as this is not an original tax invoice by SARS definition but a copy.
- The following wording needs to appear on the invoice: "Your invoice is encrypted in order to comply with SARS requirements that invoices, and statements sent electronically are tamperproof."

Introduction of electronic invoicing does not guarantee payment but will ensure visibility of all invoices and ensure that no invoices get lost. If the goods receipt is not done the invoice will be parked and the system

will automatically send an e-mail to the end user to do the goods receipt. This is also tracked by Eskom-NTCSA through the parked invoice report.

PROCEDURE FOR INVOICE PAYMENT:

- Once work / activity is complete, both parties are to agree
- A payment certificate will be created to certify the work done – both parties to sign
- Employer's end user to use payment certificate to do Service Entry and Goods Receipt
- Payment certificate to have amount due, service entry number, goods receipt number and order number
- Copy of the payment certificate is to be issued to the service provider
- Contractor to create invoice in terms of the payment certificate
- Invoice to have order number, goods receipt number and service entry number displayed
- Service Provider to attach copy of signed payment certificate to invoice and send it electronically to invoicentcsalocal@ntcsa.co.za.
- Procedure for retention payments is the same
- For first retention release a completion certificate is required

Contract change management

This section is intended to deal with any additional requirements to the compensation event clauses in section 6 of the core clauses; such as the use of standard forms. Not the same thing as documentation control. Will happen when compensation event arises.

Inclusions in the programme

Not Applicable.

Quality management

System requirements

The service provider shall conform with the following standards and documents below as per the Quality Management Specification (QM 58 document) under category 4:

SECTION A: Quality Management System Requirements ISO 9001

- A.1 Quality Method statement based on scope (Method Statement Template-Ref 240-126469599)
- A.2 Quality Policy Approved by top management
- A.3 Quality Objectives Approved by top management

SECTION B: Evidence of QMS in operation (Tender Quality Requirements -Ref 240-105658000)

- B.1 Documented information for defined roles, responsibilities and authorities - Organization chart and Responsibility matrix (must include but not limited to quality management function/role) (Clause 5.3 of ISO 9001:2015).
- B.2 Documented information for Control of Externally Provided Processes, Products and Services - Must include criteria for evaluation, selection, monitoring of performance, and re-evaluation of external providers (Clause 8.4 of ISO 9001:2015).

SECTION E: User defined additional Requirements & miscellaneous (Ref 240-105658000)

- E.1 Form A is completed and signed.
- E.2 Proof of similar and/ or previous work done as per the scope of work and/ or specification.

Information in the quality plan

Refer to above Quality Management requirements.

The Parties use of material provided by the *Consultant****Employer's* purpose for the material**

Reports as per the deliverables.

Restrictions on the *Consultant's* use of the material for other work

The work that Consultant will be producing will be strictly used only in NTCSA.

Transfer of rights if Option X 9 applies

Not Applicable.

Management of work done by Task Order

Not Applicable.

Health and Safety**OHS REQUIREMENTS:**

The service provider shall conform and comply with the following standards and legislation below:

- Health and Safety and Environment Specification
- Post contract award OHS Requirements
- Basic Condition of Employment Act No. 75 of 1997
- Occupational Health and Safety Act and Regulations No. 85 of 1993
- 32 – 37 Eskom Substance Abuse Procedure
- 240-62196227 Life- Saving Rules
- 32-95 Occupational Health and Safety Incident Management
- 32-727 SHEQ Policy
- 32- 418 Working at Heights Procedure
- ISO 45001: Occupational Health and Safety Management System
- Eskom's Covid-19 Health and Safety Policy statement
- National Road Traffic Management Act.

The *Consultant* shall at all times comply with the health and safety requirements prescribed by law as they may apply to the *services*.

[If the *Consultant* may be required to work on Eskom premises, such as a power station, where health and safety requirements additional to those prescribed by law apply, specify these here or state, The *Consultant* shall comply with the health and safety requirements contained in above Annexure to this Scope.

Procurement**BBBEE and preferencing scheme**

The following documents are required to claim preference points:

Valid B-BBEE certificate issued by a SANAS accredited verification agency / sworn affidavit / CIPC affidavit.

“proof of B-BBEE status level of contributor” means-

- (a) the B-BBEE status level certificate issued by an authorised body or person; or
- (b) a sworn affidavit as prescribed by the B-BBEE Codes of Good Practice; or;
- (c) any other requirement prescribed in terms of the Broad-Based Black Economic Empowerment Act.

Specific goals would be scored out of **20** points in accordance with the PPPFA.

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

If a tenderer fails to submit evidence of its points claim for a Specific Goal, it will not be disqualified. However, it will be awarded 0 points for that Specific Goal.

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

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

Transformation – BBBEE Improvement or Retention Plan

Transformation remains an area of focus, where NTCSA continuously strives to align itself with national transformation imperatives to unlock growth, drive industrialization, create employment and contribute to skills development.

NTCSA encourages its suppliers to constantly strive to improve their B-BBEE rating. Whereas Tenderer/s will be allocated points in terms of a preference point system based on specific goals, NTCSA also requests that tenderer/s submits their B-BBEE improvement or retention plan within 30 days of signing the contract.

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

Tenderer/s with a B-BBEE recognition status of Level 5 to Level 8 or non-compliant at the time of contract award, shall migrate and achieve as a non-negotiable a milestone of Level 4 by the end of the first year of the contract and thereafter improve at least one B-BBEE Level higher of each year from the second year of the contract.

Tenderer/s are requested to submit their B-BBEE Improvement Plan as an essential document within 30 days of signing the contract.

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

B-BBEE requirements

All tenderers must at a minimum maintain their B-BBEE status throughout the contract period.

Skills Development

Tenderers are required to propose against the following training initiatives:

| Skills Type | NTCSA Target | Supplier's Proposal |
|--|--------------|---------------------|
| Renewable energy skills development training | 2 | |
| Capacity building in renewable energy systems and applications | 2 | |

Qualifying candidates shall be currently unemployed graduates from University, Technical and Vocational Education and Training (TVET) Colleges and/or Matriculates. The skills development candidates shall be representative of the population demographics of South Africa.

Job Opportunities:

Not Applicable.

Section 4: SDL&I penalty and performance security:

NTCSA will apply a penalty of 2.5% of the Contract Value for failure to meet SDL&I obligations. For the duration of the contract, NTCSA will retain 2.5% of every invoice (excluding VAT) as security for the fulfilment of all SDL&I Obligations. The retained amounts shall only be released to the Contractor upon:

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

Section 5: Reporting and Monitoring:

- The suppliers shall on a quarterly basis submit a report to NTCSA in accordance with Data Collection Template on their compliance with the SDL&I obligations described above.
- NTCSA shall review the SDL&I reports submitted by the suppliers within 30 (thirty) days of receipt of the reports and notify the suppliers in writing if their SDL&I obligations have not been met.
- Upon notification by NTCSA that the suppliers have not met their SDL&I obligations, the suppliers shall be required to implement corrective measures to meet those SDL&I obligations before the commencement of the following report, failing which Retention clauses shall be invoked.
- Every contract shall be accompanied by the SDL&I Implementation Schedule, which must be completed by the suppliers and returned to SDL&I representative for acceptance 28 days after contract award. This will be used as a reference document for monitoring, measuring and reporting on the supplier's progress in delivering on their stated SDL&I commitments.

Other constraints

Not Applicable

Preferred subconsultants

Not Applicable

Subcontract documentation, and assessment of subcontract tenders

Not Applicable

Limitations on subcontracting

Not Applicable

Attendance on Subconsultants

Not Applicable

Correction of Defects

Not Applicable

Working on the *Employer's* property

Not Applicable

***Employer's* entry and security control, permits, and site regulations**

Not Applicable

People restrictions, hours of work, conduct and records

Not Applicable.

Cooperating with and obtaining acceptance of Others

Not Applicable.

Things provided by the *Employer*

Not Applicable.

Cataloguing requirements by the *Consultant*

Not Applicable.

