



NEC3 Professional Services Contract (PSC3)

Contract between Eskom Holdings SOC Ltd
(Reg No. 2002/015527/30)

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

for Professional services-Harmonics and Switching
studies for Brenner (2 x 48 MVAR 88kV Capacitor
Banks) Strengthening Phase 1 project.

Contents:	No of pages
Part C1 Agreements & Contract Data	15
Part C2 Pricing Data	5
Part C3 Scope of Work: The Scope	9

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]	[•]
C1.2a	Contract Data provided by the <i>Employer</i>	[•]
C1.2b	Contract Data provided by the <i>Consultant</i> [to be inserted from Returnable Documents at award stage]	[•]
C1.3	Securities proforma	[•]

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:

Professional services-Harmonics and switching studies for Brenner (2 x 48 MVAR 88kV Capacitor Banks) Strengthening Phase 1 project.

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	R
Value Added Tax @ 15% is	R
The offered total of the Prices inclusive of VAT is	R
(in words)	

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		
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 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.

Claus e	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option	A: Priced contract with activity schedule
	and secondary Options	W1: Dispute resolution procedure
		X2 Changes in the law
		X7: Delay damages
		X10 <i>Employer's Agent</i>
		X11: Termination by the <i>Employer</i>
		X18: Limitation of liability
		X20: Key Performance Indicators
		Z: <i>Additional conditions of contract</i>
	of the NEC3 Professional Services Contract (April 2013) ¹	
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	
	Fax No.	
11.2(9)	The <i>services</i> are	Conduct harmonic and switching studies professional services and produce a report for Brenner (2 x 48 MVAR 88kV caps) Strengthening Phase 1 project.

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

11.2(10) The following matters will be included in the Risk Register

Inclement weather
 Live conditions on site
 Electrical shock
 Possible injuries on site
 Industrial or community unrest
 Hijacking
 Make further reference to the baseline risk assessment.

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	Two (2) weeks
13.6	The <i>period for retention</i> is	Not Applicable

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 Consultant	As and when required. Request to be communicated a week prior to the site visit date

3 Time

31.2	The <i>starting date</i> is.	01 October 2022		
11.2(3)	The <i>completion date</i> for the whole of the <i>services</i> is.	30 September 2023		
11.2(6)	The <i>key dates</i> and the <i>conditions</i> to be met are:	<i>Condition to be met</i>		<i>key date</i>
		1	Appointments	November 2022
		2	Site Visit	January 2023
		3	Draft Report	March 2023
		4	Progress Meeting	April 2023
		5	Final Report	May 2023
31.1	The <i>Consultant</i> is to submit a first programme for acceptance within	One (1) week of the Contract Date.		
32.2	The <i>Consultant</i> submits revised programmes at intervals no longer than	Two (2) weeks.		

4 Quality

40.2	The quality policy statement and quality plan are provided within	Two (2) weeks of the Contract Date.
42.2	The <i>defects date</i> is	Not Applicable.

5	Payment	
50.1	The <i>assessment interval</i> is	between the 25th day of each successive month.
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
51.5	The <i>interest rate</i> is	<p>the publicly quoted prime rate of interest charged by (calculated on a 365day year) 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	Four (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	
	Tel No.	
	Fax No.	
	e-mail	
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	Republic of 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	Of the Republic of South Africa
X7	Delay damages	
X7.1	Delay damages for late Completion of the whole of the <i>services</i> are	0.1% per day up to a limit of 15% of total contract value
X10	The <i>Employer's Agent</i>	
X10.1	The <i>Employer's Agent</i> is	
	Name:	TBA

	Address	Eskom SOC LTD, Megawatt Park Head Office, Sunninghill.
	The authority of the <i>Employer's Agent</i> is	Senior Engineer
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 <i>Additional conditions of contract</i> 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 4740101508 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, 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.

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>	Commercial and business to determine.	Commercial and business to determine
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>	Commercial and business to determine
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	Commercial and business to determine

81.3 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 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 *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, 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)¹ 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	
11.2(10)	The following matters will be included in the Risk Register	

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

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	
C	Target contract		
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	
G	Term contract		
11.2(25)	The <i>task schedule</i> is in		

PART 2: PRICING DATA

PSC3 Option A

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

C2.1 Pricing assumptions: Option A

1. 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)).

2. 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.

3. 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*.

4. 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.

5. 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.

6. 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*

Use this page as a cover page to the *Consultant's activity schedule* or include here in this format:

[illegible]

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.

The *staff rates* are:

No.	Designation (or category) or name of staff member	Rate per {hour, day, month} excluding VAT

The *expenses* are:

No.	Expense item	Amount / rate excluding VAT

PART 3: SCOPE OF WORK

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

C3.1: EMPLOYER'S SCOPE

Contents

When the document is complete, insert a 'Table of Contents'. To do this go to: Insert, → Reference, → Index and tables → Table of Contents. Three levels and the title (but not the subtitle) may be shown if the formats used in this template are retained.

Otherwise insert list of contents manually.

1 Description of the services

1.1 Executive overview

The Brenner shunt capacitor Project requires two (2) new shunt capacitor banks at Brenner substation rated 48 MVAR each at 88 kV system voltage level. The harmonic and switching study is required to determine the need and sizing of filter requirements for new shunt capacitor banks, which will be installed at the Transmission substation situated in the Central Grid, Gauteng Province. The installation of the new capacitor banks will improve the reactive power compensation and the voltage control resolution at the substation. The filter will mitigate harmonic distortion violations and harmonic amplifications as to comply with quality of supply standards where required. The switching part of the study will identify and rate switchgear equipment to adequately meet any filter mitigation requirement identified.

1.2 Interpretation and terminology

The following abbreviations are used in this Scope:

Abbreviation	Meaning given to the abbreviation
ECSA	Engineering Council of South Africa
SACPCMP	South African Council for Project and Construction Management Professionals
Cap Bank	Capacitor Bank
PM	Project Manager
SS	Sub station
FAT	Factory Acceptance Test
RTS	Real Time Simulation
SAT	Site Acceptance Testing

2 Specification and description of the services

The content of this section is the meat of the scope of work and will depend on the nature of the services required. The *Consultant* may be appointed for a wide range of duties. The range is almost limitless but would typically include:

- Provide services of an advisory or specialist nature.
- Conduct training on an ad hoc basis.
- Manage a service or facility on behalf of the *Employer*.
- Develop a software application and then implement it throughout the *Employer's* organisation.
- Act as the architect for the design and supervision of a new building.
- Act as the engineer for the design of a new project or structure.
- Act as a cost engineer or quantity surveyor on a project.
- Act as the *Project Manager* in terms of an ECC contract or as a project manager for a total project.
- Act as the *Supervisor* in terms of an ECC contract.

Professional services contracts are by nature specialised and it would be impractical to prescribe formats here to cover such a wide range of duties as those listed above.

For engineering and construction services, document compilers are advised to consult a paper issued by CIDB entitled, "A generic scope of work for services relating to construction works. 18 October 2006".

This paper identifies a generic format as well as giving guideline scope of services for the appointment of members of the various statutory councils operating in South Africa such as ECSA, SACQSP, SACAP and SACPCMP.

The Construction Industry Council (UK) has developed a generic approach suitable for the appointment of most professional disciplines in the engineering and construction sector. This requires the Scope to be compiled for stages of the services associated with a project and is described on pages 1 and 3 of the above referenced paper. If this approach were to be followed, this section could be developed as follows:

The scope of the study comprises:

- Steady state switching studies to determine violations of the maximum change in steady state voltages due to switching of the capacitors
- Frequency scanning studies to determine the network resonances with various combinations of capacitor switching configurations
- Harmonic load flow studies to determine voltage violations at each harmonic frequency arising from the assumed harmonic current injections and network resonances
- Identification of filter requirements and selection of the most appropriate filter(s) to mitigate the harmonic violations. The aim is to determine if the bank should remain as a shunt bank or be converted to a filter.
- Transient switching studies to establish the transient recovery voltages (TRVs) and inrush currents due to capacitor switching.
- The study shall be conducted for the horizon period 2020-2030.
- Background harmonic measurements shall be supplied by Eskom
- Confirmation that the capacitor bank sizing is still adequate and required by the system

The study shall be conducted at the following substation:

No	Substation	Description	Location	GPS Co-ordinates
1.	Brenner substation	Two new shunt capacitor banks are required on the 88kV busbar rated, 48 MVAR.	Gauteng Province, Central Grid	-26.27887S 28.27720E

The following minimum criteria shall be used to conduct the harmonic integration studies:

- All future Network Expansions as per Case File
- All major N-1 contingencies to be used when frequency scan is performed
- High and Low load conditions
- Operational status of bus couplers and bus sections
- Filter solutions to be rated to operate at maximum continuous operating voltage, UM
- Planning versus Compatibility Levels as per NRS048 standard to be included where filter ratings are determined
- Impact on existing compensation devices
- Tuned versus de-tuned filter solutions to be considered
- Filter solution selection to consider Network Losses
- Filter solutions to optimise and support interchangeability of component ratings between various shunt capacitor substations and installations.

2.1 Stage 1 Preparation

Not applicable

2.2 Stage 2 Concept

Not applicable

2.3 Stage 3: Design development

Not applicable

2.4 Stage 4: Production information

Not applicable

2.5 Stage 5: Manufacture, Installation and Construction Information:

Not applicable

2.6 Stage 6: Post Practical Completion

Not applicable

3 Constraints on how the *Consultant* Provides the Services.

3.1 Management meetings

The *conditions of contract* (e.g. Clause 15.2) and other sections of this Scope may require that a meeting be held. However the intention of all NEC contracts is that the Parties and their agents use the techniques of partnering to manage the contract by holding meetings designed to pro actively and jointly manage the administration of the contract with the objective of minimising the adverse effects of risks and surprises for both Parties.

Depending on the size and complexity of the *services*, it is probably beneficial for the *Employer's Agent* to hold a weekly risk register meeting (Clause 15.2). This could be used to discuss compensation events, sub consulting, overall co-ordination and other matters of a general nature. Separate meetings for specialist activities such as programming and activities of a technical nature may also be warranted.

Describe here the general meetings and their purpose. Provide particulars of approximate times, days, location, and attendance requirements, stipulating that attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings. The following text could be used as a model for this section:

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	As and when required	Site or MsTeams	Cross functional team
Overall contract progress and feedback	As and when required	Site or MsTeams	<i>Employer's Agent</i> , <i>Consultant</i> and other Cross functional team members

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.

3.2 Consultant's key persons

State any additional constraining requirements on *Consultant's key persons* over and above those already stated in clause 22.1 or in the Contract Data. Such as need to notify contact details, leave and mentoring requirements where applicable. This section could be used to solicit an organogramme from the *Consultant* showing his people and their lines of authority / communication. This would be essential if the *Consultant* is a Joint Venture.

3.3 Provision of bonds and guarantees

Not Applicable

3.4 Documentation control and retention

3.4.1 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 email itself. State any particular routing requirements but note from PSC3 who issues what to whom.

3.4.2 Retention of documents

Clause 13.6 states that the Consultant retains copies of drawings, specifications, reports and other documents which record the services in the form stated in the Scope. Note the time period for which the Consultant is to retain such documents is the period for retention stated in the Contract Data.

3.5 Records and forecasting of expenses

First read clause 21.3 (Option A) and additional requirements is submission of forecast rate of invoicing.

3.6 Records and forecasting of the Time Charge

Not Applicable

3.7 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.

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 *Employer* and include on it the following information:

- Name and address of the *Consultant* and the *Employer's Agent*;
- The contract number and title;
- *Consultant's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

A copy of the invoice along with the supporting documents (all copies) shall be emailed/delivered to the supply manager in order for him/her to assess and create the Goods Receipt (GR) before payment can be

made upon submission of the original invoice with the GR Number included to the Eskom Accounts Payable Department.

3.8 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.

3.9 Inclusions in the programme

First read clause 31.2 and then include here any matters regarding the order and timing of the work of the Employer and Others which the Consultant is take account of in his programme. Also describe any information other than that already requested in clause 31.2 which the Consultant is to show on each programme he submits for acceptance.

3.10 Quality management

3.10.1 System requirements

Clause 40.1 requires that the Consultant operate a quality management system as stated in the Scope.

3.10.2 Information in the quality plan

Clause 40.2 requires that the Consultant provide a quality policy statement and quality plan which complies with requirements stated in the Scope.

3.11 The Parties use of material provided by the *Consultant*

3.11.1 *Employer's* purpose for the material

Clause 70.1 states that the Employer has the right to use the material provided by the Consultant for the purpose stated in the Scope.

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

Read clause 70.4 first and if you want to restrict the Consultant's use of material provided by him for this contract on other work state these here.

3.11.3 Transfer of rights if Option X 9 applies

Not Applicable

3.12 Management of work done by Task Order

Not Applicable

3.13 Health and safety

Clause 25.4 states that the *Consultant* acts in accordance with the health and safety requirements stated in the Scope. It is suggested that this part of the Scope address how the *Consultant* acts when doing his services. These requirements may be no more than just complying with the law. However if the *Consultant* is required to work on Eskom premises, then whatever requirements which personnel working in those premises need to comply with should be included here or referred to in an Annexure.

If when doing his services the *Consultant* is required to carry out a design which needs to take account of certain health and safety criteria, then this should be included in the specification of that design service stated elsewhere in the Scope. A draft for this section could start as follows:

The *Consultant* shall at all times comply with the health and safety requirements prescribed by law as they may apply to the *services*. The *Consultant* shall comply with the health and safety requirements contained in Annexure SHE Specification to this Scope.

3.14 Procurement

3.14.1 BBBEE and preferencing scheme

Not Applicable

3.14.2 Other constraints

Not Applicable

3.14.3 Preferred subconsultants

Not Applicable

3.14.4 Subcontract documentation, and assessment of subcontract tenders

Not Applicable

3.14.5 Limitations on subcontracting

Not Applicable

3.14.6 Attendance on Subconsultants

Not Applicable

3.15 Correction of Defects

Not Applicable

3.16 Working on the *Employer's* property

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

Different Eskom Sites (Sub Stations) have very strict entrance requirements which tendering consultants need to allow for in their prices, and the *Consultant* has to comply with. State these or similar requirements here. In addition, there may be other restrictions once on the site like other Consultants/Contractors on site, work stoppage or no entrance due to other network related matters on site. This part of the Scope addresses constraints, facilities, services and rules applicable to the *Consultant* whilst he is doing work on the *Employer's* property.

3.16.2 People restrictions, hours of work, conduct and records

Restrictions and hours of work may apply on some sites. It is very important that the *Consultant* keeps records of his people working on the *Employer's* property. The *Employer's Agent* shall have access to these records at any time. These records may be needed when assessing compensation events.

3.17 Cooperating with and obtaining acceptance of Others

This sub-paragraph could be used to deal with two issues.

- 1) The cross reference from core clause 23.1 about cooperation generally as well as details about Others with whom the *Consultant* may be required to work. See clause 11.2(7) for the definition of Others.
- 2) Requirements for liaison with and acceptance from statutory authorities or inspection agencies.

3.18 Things provided by the *Employer*

Not Applicable

3.19 Cataloguing requirements by the *Consultant*

If cataloguing is applicable, for referencing the requirements for cataloguing that need to be satisfied by the *Consultant*, Procurement Instruction Number 1 of 2018 – Incorporating Cataloguing into the Procurement Environment, Unique Identifier 240-1289988974 shall be consulted.

4 List of drawings

4.1 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.

Drawing number	Revision	Title