

PART 2: PRICING DATA

ECC3 Option B

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option B	
C2.2	The <i>bill of quantities</i>	

C2.1 Pricing assumptions: Option B

1. How work is priced and assessed for payment

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

Identified and defined terms	11 11.2	(21) The Bill of Quantities is the <i>bill of quantities</i> as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.
		(28) The Price for Work Done to Date is the total of <ul style="list-style-type: none">the quantity of the work which the <i>Contractor</i> has completed for each item in the Bill of Quantities multiplied by the rate anda proportion of each lump sum which is the proportion of the work covered by the item which the <i>Contractor</i> has completed.
		Completed work is work without Defects which would either delay or be covered by immediately following work.

(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

2. Function of the Bill of Quantities

Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

3. Guidance before pricing and measuring

Employers preparing tenders or contract documents, and tendering contractors are advised to consult the sections dealing with the bill of quantities in the NEC3 Engineering and Construction Contract Guidance Notes before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.

There is no general provision in Option B for payment for materials on Site before incorporation into the *works*. If secondary Option X14 Advanced payment has not been used then the tendering contractor may obtain the same effect by inserting appropriate items in the method related charges where the *method of measurement* allows, or alternatively making allowance in the rates of the *bill of quantities* for the financing of Plant and Materials until they are incorporated in the *works*.

When compensation events arise, the default position is that the Bill of Quantities is not used to calculate the cost effect of the event. Defined Cost and the resulting Fee is used and Defined Cost includes all components of cost which the *Contractor* is likely to incur, including so called P & G items. Rates and lump sums from the Bill of Quantities, or from any other source, may be used instead of Defined Cost and the Fee only if the *Contractor* and *Project Manager* agree. If they are unable to agree, then Defined Cost

plus Fee is used.

4. Measurement and payment

4.1. Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m ²	square metre
m ² -pass	square metre pass
m ³	cubic metre
m ³ -km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
No.	number
sum	Lump sum
t	tonne (1000kg)

4.2. General assumptions

- 4.2.1. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.
- 4.2.2. The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.
- 4.2.3. An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*.
- 4.2.4. The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the *Project Manager* at each assessment date will be used for determining payments due.
- 4.2.5. The short descriptions of the items of payment given in the *bill of quantities* are only for the purposes of identifying the items. Detail regarding the extent of the work entailed under each item is provided in the Works Information.

4.3. Departures from the *method of measurement*

4.3.1.

4.4. Amplification of or assumptions about measurement items

The following is provided to assist in the interpretation of descriptions given in the *method of measurement*. In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in this section shall be used.

4.4.1.

C2.2 the bill of quantities

PROJECT REPORT : SUPPLY, INSTALLATION AND COMMISSIONING OF FUEL MANAGEMENT SYSTEM (DIESEL AUTOMATION) AT KUSILE POWER STATION - REV 2

DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A. PRELIMINARIES AND GENERAL				
Site Establishment	Sum	1		
Site De-Establishment	Sum	1		
3 x 6m Aircon Container with 2x offices - 2No	Per Month	2		
Medicals - Entry	Once Off	12		
Medicals - Exit	Once Off	12		
PPE	Once Off	12		
Safety File	Once Off	1		
Mobile Ablution Facility - 2No	Per Month	2		
Security Clearance/Screening Certification (Obtained from SAPS, MIE or Accredited Institution)	Once Off	12		
Transport - Kombi (1No for 2 months): 15 seater	Per Month	2		
TOTAL COST FOR: PRELIMINARIES AND GENERAL				R

DESCRIPTION	UNIT	QTY	HOURS (Where Applicable)	RATE	AMOUNT
A1. ESTABLISHMENT OF WORK (Setting out including surveys - Geometric survey and geotechnical testing (if required), Underground cable detection)					
NOTE: PROVIDE DETAILED COST BREAKDOWN					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
TOTAL COST FOR: ESTABLISHMENT OF WORK					R

DESCRIPTION	UNIT	QTY	HOURS (Where Applicable)	RATE	AMOUNT
B1. BOWSER FUEL MANAGEMENT, METERING AND MONITORING (Pump Mounting Kit, Tag Reader, Off-Loading Solution, etc)					
NOTE: PROVIDE DETAILED COST BREAKDOWN					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
TOTAL COST FOR: BOWSER FUEL MANAGEMENT, METERING AND MONITORING					<u>R</u>

DESCRIPTION	UNIT	QTY	HOURS (Where Applicable)	RATE	AMOUNT
B2. NEW PUMPS FUEL MANAGEMENT, CABLING, METERING AND MONITORING					
NOTE: PROVIDE DETAILED COST BREAKDOWN					
<i>CURBSIDE PUMPS:</i>					
1.					
2.					
3.					
4.					
5.					
<i>FLOWMETER:</i>					
1.					
2.					
3.					
4.					
5.					
<i>REGISTER HEAD:</i>					
1.					
2.					
3.					
4.					
5.					

CABLING:				
1.				
2.				
3.				
4.				
5.				
Freight (Delivery of the pumps to Kusile Power Station)				
TOTAL COST FOR: NEW PUMPS FUEL MANAGEMENT, CABLING, METERING AND MONITORING				<u>R</u>

DESCRIPTION	UNIT	QTY	HOURS (Where Applicable)	RATE	AMOUNT
B3. AUTOMATED TANK GAUGING SYSTEM FOR EXISTING TANK (Consoles & Probes)					
NOTE: PROVIDE DETAILED COST BREAKDOWN					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
TOTAL COST FOR: AUTOMATED TANK GAUGING SYSTEM FOR EXISTING TANK (Consoles & Probes)					<u>R</u>

DESCRIPTION	UNIT	QTY	HOURS (Where Applicable)	RATE	AMOUNT
B4. VEHICLE/PLANT IDENTIFICATION, TRACKING AND MONITORING					
NOTE: PROVIDE DETAILED COST BREAKDOWN					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
TOTAL COST FOR: VEHICLE/PLANT IDENTIFICATION, TRACKING AND MONITORING					R

DESCRIPTION	UNIT	QTY	HOURS (Where Applicable)	RATE	AMOUNT
B5. EXTERNAL CIVIL WORKS and NEW PIPEWORK AND FITTINGS					
NOTE: PROVIDE DETAILED COST BREAKDOWN					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
TOTAL COST FOR: EXTERNAL CIVIL WORKS and NEW PIPEWORK AND FITTINGS					<u>R</u>

B5.1 ELECTRIC WORKS, DB, CABLING AND FITTINGS					
NOTE: PROVIDE DETAILED COST BREAKDOWN					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
TOTAL COST FOR: ELECTRIC WORKS, DB, CABLING AND FITTINGS					<u>R</u>

DESCRIPTION	UNIT	QTY	HOURS (Where Applicable)	RATE	AMOUNT
B6. LICENCE, CALIBRATION AND SYSTEM UPDATES					
Calibration of pumps	No	4			
Fee (Cloud) Fuel Reconciliation and File transfer of data only	Once off	1			
System Checks and calibrations [Site maintenance and frequency viz Supply inlet, tank level, outlet flow calibrations and checks]	Monthly	12			
Call out - Emergency response (Non-defects)	Monthly	12			
TOTAL COST FOR: LICENCE, CALIBRATION AND SYSTEM UPDATES					<u>R</u>

B7. KRAFTWERK - KENNZEICHEN SYSTEM LABELLING				
Anodised Aluminium tags	No	10		
TOTAL COST FOR: KRAFTWERK - KENNZEICHEN SYSTEM LABELLING				R
SUMMARY				
A. TOTAL COST FOR: PRELIMINARIES AND GENERAL				
A1. TOTAL COST FOR: ESTABLISHMENT OF WORK				
B1. TOTAL COST FOR: BOWSER FUEL MANAGEMENT, METERING AND MONITORING				
B2. TOTAL COST FOR: NEW PUMPS FUEL MANAGEMENT, CABLING, METERING AND MONITORING				
B3. TOTAL COST FOR: AUTOMATED TANK GAUGING SYSTEM FOR EXISTING TANK (Consoles & Probes)				
B4. TOTAL COST FOR: VEHICLE/PLANT IDENTIFICATION, TRACKING AND MONITORING				
B5. TOTAL COST FOR: EXTERNAL CIVIL WORKS and NEW PIPEWORK AND FITTINGS				
B5.1 TOTAL COST FOR: ELECTRICAL WORKS, DB, CABLING AND FITTINGS				
B6. TOTAL COST FOR: LICENCE, CALIBRATION AND SYSTEM UPDATES				
B6. TOTAL COST FOR: KRAFTWERK - KENNZEICHEN SYSTEM LABELLING				
TOTAL AMOUNT (EXCL VAT)				R