PART 2: PRICING DATA

TSC3 Option A

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C	2.1	Pricing assumptions: Option A	2
C	2.2	The price list	[•]

C2.1 Pricing assumptions: Option A

1. How services are priced and assessed for payment

Clause 11 in NEC3 Term Service Contract (TSC3) core clauses and Option A states:

Identified and defined terms

11 11.2

50.2

- (11) The Prices are the amounts stated in the price column of the Price Schedule. Where a quantity is stated for an item in the Price Schedule, the Price is calculated by multiplying the quantity by the rate
- (12) The Price Schedule is the *price schedule* unless later changed in accordance with this contract.

Assessing the amount due

The amount due is

- the Price for each lump sum item in the Price List which the Contractor has completed and
- where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.

Any tax which the law requires the *Purchaser* to pay to the *Supplier* is included in the amount due.

This confirms that Supply contract is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

2. Function of the Price List

Clause 54.1 in Option A states: "Information in the Price List is not Service Information". This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Service in accordance with the Service Information". Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

3. Link to the Contractor's plan

Clause 21.4 states "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

4. Preparing the price list

Items in the *price schedule* may have been inserted by the *Purchaser* and the tendering supplier should insert any additional items which he considers necessary. Whichever party provides the items in the *price schedule* the total of the Prices is assumed to be fully inclusive of everything necessary to Provide the Goods and Services as described at the time of entering this contract.

It will be assumed that the tendering supplier has:

- Read Pages 8, 11, 12 and Appendix 5 of the SC3 Guidance Notes before preparing the price schedule.
- Included in his Prices and rates for correction of Defects (core clause 43.1) as there is no compensation event for this unless the Defect is due to a *Supplier's* risk.
- Spread the cost of doing work he chooses not to list as separate items in the *price schedule* across other Prices and rates in order to fulfil the obligation to Provide the Goods and Services for the tendered total of the Prices.
- Understood that there is no adjustment to lump sum prices in the *price schedule* if the amount, or quantity, of work within that lump sum item later turns out to be different to that which the *Supplier* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event per clause 60.1.
- Understood that the *Supplier* does not have to allow in his Prices and rates for matters that may arise as a result of a compensation event.

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4.1. Format of the price list

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

C2.2 the price list

Item					Unit	Total
No.	Description	UoM	Quantity	Outages	Price	Price
Α	SECTION A: PRELIMINARIES & GENERALS					
	Administration And Contract Planning and					
1	Submissions of Updated Schedules	no	15			
_	Quality-Documentation and Reviews of Plant	110	15			
2	Performance	no	15			
	Saps Vetting Fingerprint Checks Every 6					
3	Months	no	20			
4	Health And Safety Requirements-Safety Files	sum	1			
5	PPE					
5.1	Safety Helmet	no	20			
5.2	Rubber resistant gloves	no	40			
5.3	Safety Goggles	no	40			
5.4	Overalls	no	40			
5.5	Dust Masks	box	5			
5.6	Safety Shoes	no	20			
5.7	Ear Plugs	box	5			
6	Medicals And Induction	no	20			
7	Travel Return Trip 15 Days Servicing Schedule	km	3000	15		
	Sub Total Standard Service of Skid Dryer and					
	Co2 Evaporator					
	SECTION D. STANDARD FULL SERVICE OVER					
	SECTION B: STANDARD FULL SERVICE SKID- DRYER AND CO2 EVAPORATOR INCLUDING					
В	STANDARD SERVICE SPARES					
	STANDARD SERVICE STARES					
	STANDARD SERVICE OF SKID DRYER AND					
	CO2 EVAPORATOR					
	_					
	Safety Relief Valves, Remove Clean Inspect					
1	and Calibrate- Re-Install	each	7	15		
	Pressure Gauges/Indicators Remove and					
2	Calibrate-Re-Install	each	12	15		
	Pressure Transmitters Remove and Calibrate-					
3	Re Install	each	7	15		

	Flow Indicators- Remove Inspect and Clean-				
4	Re-Install	each	2	15	
	Temperature Gauges/Indicators Remove and	odon		10	
5	Calibrate-Re-Install	each	3	15	
	Switching Function of Thermostats-				
	Temperature Controllers Check Set Points 2				
6	On H2 Dryer 2 On Co2 Evaporator Unit	each	4	15	
	Contact Pressure Switch 1 Of Remove				
7	Calibrate- Re-Install	each	1	15	
	Remove Calibrate H2 And Co2 Vortex Flow				
8	Transmitters	each	2	15	
	Remove Calibrate H2 Low Flow Mass Flow				
9	Transmitter	each	1	15	
	Test Heater Element- Inspect Connections				
10	and Heater Junction Box	each	1	15	
	Co2 Evaporator Inspect and Clean Heater Top				
	Junction Box And Heater Control Box				
11	Enclosure	each	1	15	
	Perform System Functionality Checks On Co2				
12	Evaporator Unit	each	1	15	
	H2 Dryer Remove Top Flanges, Remove				
13	Desiccant	each	2	15	
14	Inspect And Test Heater Elements	each	2	15	
15	H2 Dryer Remove Bottom Flanges, And Motors	each	2	15	
16	H2 Dryer Inspect and Test Blower Motors	each	2	15	
	Open Clean Inspect and Test Gen Aux Skid Lld		_		
17	Detectors	each	2	15	
	H2 Dryer Install New Desiccant, Re-Install				
18	Heaters, Box Up	each	1	15	
19	H2 Dryer Re-Install Motors, Box Up	each	1	15	
	H2 Dryer Open Inspect Service and Re-Install		_		
20	Drain Trap	each	1	15	
	H2 Dryer Open Inspect Service and Re-Install		_		
21	4-Way Valve Actuator	each	1	15	
	H2 Dryer Open Inspect and Clean Oil Vapor				
22	Filter	each	1	15	
23	Perform Function Checks on H2 Dryer	each	1	15	
	Open Inspect and Clean Main Isolation Valves		_		
24	Replace Seats If Necessary	each	21	15	
	Open Inspect, Clean and Test H2 Supply				
25	Pressure Regulator	each	1	15	
	Open Inspect, Clean and Test Co2 Final				
26	Pressure Regulator	each	1	15	
	Open Inspect, Clean and Test Co2 Supply				
27	Pressure Regulator	each	1	15	
	Perform Leak Checks on All Flanged And				
28	Threaded Connections	each	1	15	
	Assist With Gas Up Of Unit- 4 Days On Site For				
29	Gas Up Issues	each	4	15	

Ì	Spares- Consumables Electrical Cleaner,					1
30	Degreaser, Rags, Ptfe Thread Seal Tape	per Outage	1	15		
31	Spares-Drain Trap Repair Kit		1	15		
32		each				
32	Spares - Actuator Repair Kit	each	1	15		
22	Spares- Carbon Media Filter (6Lbs Required					
33	for Ovf)	each	6	15		
34	Spares- Desiccant (50Lbs Required Per Tower- 100Lbs Total)		400	4-		
-	,	each	100	15		
35	Spares- H2 Pressure Regulator Repair Kit	each	1	15		
200	Spares- Co2 Final Pressure Regulator Repair					
36	Kit	each	1	15		
27	Spares Co2 Initial Pressure Regulator Repair					
37	Kit	each	1	15		
38	Spares- Gaskets 10 Inch 150Lb Klingersil C4400 1.5Mm Gaskets			4-		
36		each	4	15		
39	Spares- Gaskets 1 Inch 150Lb Klingersil C4400 1.5Mm Gaskets			4-		
39		each	30	15		
40	Spares- Gaskets 8 Inch 150Lb Klingersil C4400 1.5Mm Gaskets	!	4	4.5		
40	Spares- Gaskets 1 Inch 300Lb Klingersil	each	1	15		
41	Gaskets	aaab	10	15		
		each	10			
42	Spares- Gaskets 4 Inch 150Lb Gaskets	each	2	15		
43	Spares- Gaskets 1/2 Inch 150Lb Klingersil C4400 1.5Mm Gaskets	!	10	4.5		
43	Spares- Gaskets 1/2 Inch 300Lb Klingersil	each	10	15		
44	C4400 1.5Mm Gaskets	aaab	10	4.5		
44	Spares- Velan Valve 1 Inch Repair Kits (Kit A	each	10	15		
45	Consists of Stem and Ball Seats)	each	7	15		
47	Spares- Watlow Temperature Controllers					
47	Check And Verify Signalling from Skid Field	each	2	15		
48	Instrument to Junction Box, Simulate Signals					
40	To Dos	aaab	1	4.5		
		each	1	15		
49	Complete Gas Compliance Coc as Per Osh act and Per Regulations	!	4	4.5		
50		each	1	15		
50	Compile And Submit Service Data Pack	each	1	15		
					ſ	
	Sub-Total Skid Service with Consumables					
	And Service Parts					
	SECTION C: ADDITIONAL SCOPE TO BE					
С	PERFORMED EVERY 3 YEARS ON EACH SKID					
	SYSTEM FOR COMPLIANCE FOR ALL 3 UNITS	I I		ı		T
1	Co2 Evaporator Unit- Remove Heater Element					
	for Inspection With Mobile Crane	no	6	1		
_	Co2 Evaporator Unit- Inspect Heater Element					
2	Bundle Clean and Inspect Heater And Vessel					
	Internally	no	6	1		

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	Co2 Evaporator Unit- Perform Wall Thickness					
3	and Statutory Pressure Vessel Testing On Co2					
	Vessel	no	6	1		
4	H2 Dryer Unit - Perform Wall Thickness and					
4	Statutory Pressure Vessel Testing On H2 Dryer Vessels	no	10	1		
	Vessets	no	12	1		
	Sub-Total Additional Scope to be Performed					
	every 3 Years on each Skid System					
	SECTION D: ADDITIONAL SCOPE OUT OF				i	,
D	STANDARD MAINTENANCE AS AND WHEN					
	REQUIRED		I	ı	1	I
1	Flush Skid System to Remove Oil Contamination		4	4.5		
	Contamination	no	1	15		
	Sub-Total Additional Scope out of Standard					
	Maintenance					
Е	SECTION E : SECONDARY GAS ANALYSER					
_	SERVICE AND CALIBRATIONS		T	Г	T	T
1	Remove Sample Piping Clean and Re-Install	no	1	15		
2	Clean Analyser System	no	1	15		
3	Replace Micron Filter	no	1	15		
4	Replace O2 Cell	no	1	6		
5	Calibrate H2 Analyser- Including Use of Calibration Gasses		4	4.5		
5	Calibrate O2 Analyser- Including Use of	no	1	15		
6	Calibration Gasses	no	1	15		
7	Inspect And Test Auto Shut Off System	no	1	15		
-		110		10		
	Sub-Total Secondary Gas Analyser Service		L	<u> </u>		
	and Calibrations					
	MODIFICATIONS					
F	SECTION F: ANALYSER AND PIPING MODS ONCE OFF SYSTEM MODIFICATION					
	ONCE OFF STSTEM MODIFICATION					
	UNIT 1					
1	Spares- O2 Transmitter		1			
2	Spares- O2 Hansimittel Spares- O2 Flow Indicator		1			
3	Spares- O2 Valve		1			
4	Calibrate O2 Transmitter		1			
5	Compliance Certification		1			
6	Install New Dew Point Probes into H2 Dryer		2			
<u>`</u>			_			

	Opti-Electronic Level Switch Exia Rated For			
7	Zone 2 Hazardous Area	1		
8	Opti Electronic Level Switch Is Barrier	1		
	Additional Compliance Certification O2			
9	Analyser	1		
	Drain Valving and Additional Pipework With			
10	Visual Indication Of Liquid	1		
11	Magnetic Valve for Inlet Automatic Isolation	1		
12	Key Operated Drain Valves	4		
	Additional Fittings and Tube to Incorporate			
13	Liquid Auto Shut Off System	1		
	Hydrogen Purity Analyser H2 - Adev 8866 -			
14	(Thermal Conductivity)	1		
15	Hydrogen Purity Analyser Display Unit Exd			
15	Local Indication of Purity Additional Compliance Certification H2	1		
16	Analyser	1		
10	Calibration Including Use of Certified	1		
17	Calibration Gas	1		
18	2 Inch Full Bore Flanged Firesafe Ball Valves	4		
19	Material To Modify Skid Existing Pipework	1		
	Isometric Drawings, Fabrication Drawings and			
20	Design Calculations	1		
	Removal And Modification to The System,			
21	Pressure Testing And Re-Painting	1		
22	Ntds	1		
	UNIT 2			
23	Calibrate O2 Transmitter	1		
24	Compliance Certification	1		
	Drain Valving and Additional Pipework With			
25	Visual Indication Of Liquid	1		
	Hydrogen Purity Analyser H2 - Adev 8866 -			
26	(Thermal Conductivity)	1		
07	Hydrogen Purity Analyser Display Unit Exd	_		
27	Local Indication of Purity	1		
28	Additional Compliance Certification H2 Analyser	1		
20	Calibration Including Use of Certified	1		
29	Calibration Gas	1		
30	2 Inch Full Bore Flanged Firesafe Ball Valves	4		
31	Material To Modify Skid Existing Pipework	1		
	Isometric Drawings, Fabrication Drawings and			
32	Design Calculations	1		
	Removal And Modification to The System,			
33	Pressure Testing and Re-Painting	1		
34	Ntds	1		
_	Sub-Total Spares	 		

G	CRITICAL SPARES AND BREAKDOWNS	1				
	CRITICAL SPARES					
1	H2 And Co2 Cylinder Hoses	each	12			
2	H2 Bull Nose Nut and Stem	each	6			
3	Co2 Bull Nose Nut and Stem	each	6			
4	H2 Cylinder Supply Regulator	each	3			
5	U-Tubes- Made Up Per Skid Unit H2 And Co2 with Quick Connectors Price Per Set	each	3			
6	100 Dial Pressure Indicators- Range to be Determined Upon Request	each	10			
7	Hdf120A Float Drain Hyperdrain	each	2			
8	Co2 Temperature Controller	each	2			
9	Co2 Temperature Switch	each	2			
10	Dryer Hmi Allen Bradley (Old Hmi Obsolete)	each	1			
11	Dryer Plc Ab (Old Plc Obsolete)	each	1			
12	Dryer Motor Starter Protector	each	4			
13	Dryer Heater And Motor Contactors	each	4			
14	Co2 Evaporator Flanged Heater Element	each	1			
15	Co2 Evaporator Ue Pressure Switch	each	1			
16	Co2 Evaporator Inlet Actuator Solenoid	each	1			
17	Co2 Evaporator Inlet Valve Actuator	each	3			
18	Dryer Temperature Controllers	each	2			
19	Dryer Inlet and Outlet Dew Point Probes	each	2			
20	Dryer Inlet and Outlet Dew Point Displays	each	2			
21	Dryer 1064W Heater Elements	each	2			
22	Dryer Blower Motors	each	2			
23	1 Inch Diaphragms	each	12			
24	1 Inch Diaphragms with Valve Bonnet	each	2			
25	1-1/2" Diaphragms	each	2			
26	1-1/2" Diaphragms with Valve Bonnet	each	2			
27	2 Inch Diaphragms	each	2			
28	2 Inch Diaphragm with Valve Bonnet	each	2			
20	Pressure Transmitter- Replacement for		_			
29 30	Rosemount-Yokogawa Ejx530A	each	4			
30	Level Switch Secondary O2 Analyser Flow Indicator Secondary Gas Analyser	each	1			
32	O2 Cell Secondary O2 Analyser	each	1			
33	Co2 Control Relay Housings	each	1			
34	Co2 Control Relay Unit	each	10			
- 34	502 Control Netay Offic	each	10		 	
	BREAKDOWNS					
	Emergency Callouts					
1	Breakdown Call Out	no	20			
	Di Callacii i Oali Oali	no	∠∪	1		

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Hydrogen Skid and Gas station Services at Grootvlei Power Station on a	n "As and when required basis"

2	Assistance With Degassing and Gassing Up The Unit Average 24Hrs On Site (24Hrs Notice To Be Provided For Normal Degas/Gasup)	no	12		
	Sub-Total for Critical Spares and Breakdowns				
	Grand Total for the Supply of Spares, Modifications and Maintenance During Operation of the H2 Dryer, H2 Skid, CO2 Evaporator and Gas Analysers Spares Scope of Work				
	Add Vat @ 15%		15%	R -	
	Grand Total for the Supply of Spares, Modifications and Maintenance During Operation of the H2 Dryer, H2 Skid, CO2 Evaporator and Gas Analysers Spares Scope of Work Including VAT				