

Certificate of attendance at Clarification Meeting

This is to certify that

_____ (Tenderer)

of

_____ (address)

was represented by the person(s) named below at the compulsory meeting held for all tenderers at _____ (location) on _____ (date), starting at _____. We acknowledge that the purpose of the meeting was to acquaint ourselves with the Site of the Works and/or matters incidental to doing the work specified in the tender documents in order for us to take account of everything necessary when compiling our rates and prices included in the tender.

Particulars of person(s) attending the meeting:

Name: _____ Signature _____

Capacity: _____ Signature _____

Name: _____ Signature _____

Capacity _____

Attendance of the above persons at the meeting is confirmed by the Employer's representative, namely:

Name: _____ Signature _____

Capacity: _____ Date and time _____



Schedule of the Tenderer's Experience

The following is a statement of similar work successfully executed by myself/ourselves:

Employer, contact person and telephone number	Description of contract	Value of work inclusive of VAT (Rand)	Date completed
PREVIEW COPY ONLY			

Signed _____

Date _____

Name _____

Position _____

Tenderer _____



Schedule of Plant and Equipment

The following are lists of major items of relevant Equipment that I/we presently own or lease and will have available for this contract or will acquire or hire for this contract if my/our tender is accepted.

(a) Details of major Equipment that is owned by and immediately available for this contract.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

(b) Details of major Equipment that will be hired, or acquired for this contract if my/our tender is acceptable.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signed Date

Name Position

Tenderer



FOREIGN EXCHANGE RATE INFORMATION REQUIRED TO BE FURNISHED BY TENDERERS.

1. Particulars of the exchange rate on which prices are based :

_____ (Foreign currency) equals R_____ (South African currency)

Note: Tenderers who offer imported material shall base their tenders on the selling rate of exchange that ruling on the last working day of the month prior to the closing date of tenders.

2. The percentage of the tender prices which is to be remitted by the tenderers from South Africa to another country is _____% of the f.o.b./c. and f./f.o.r. in bond price (delete those not applicable).

- Note:**
- (1) The percentage quoted above will be deemed to apply even though a portion only of the item(s) tendered for is accepted.
 - (2) Adjustment in respect of variation in exchange rate will be allowed only on the percentage of the tendered price quoted above.

3. The tendered price shall be computed at the rate of exchange stated by the tenderer in paragraphs 1 and 2 above as applied to the percentage of the tendered price quoted.

4. Transnet Freight Rail will accept for its account, in respect of such percentage of the tendered price as will be affected by the rate of exchange, any variation between the rate mentioned in paragraph 1 above, and the rate ruling at the date when payment for the goods is made by Transnet Freight Rail; provided that if the Contractor is required to remit the whole or portion of the contract price to another country in payment for goods or portion thereof prior to receiving payment from Transnet Freight Rail, the date(s) of such remittance(s) shall be deemed to be the date(s) of payment by Transnet Freight Rail for the purposes of this paragraph.

5. In the absence of a specific indication by the Contractor at the time of tendering that the proviso to paragraph 3 will apply, it will be assumed that the Contractor desires the adjustment to be effected by reference to the date on which actual payment is made by Transnet Freight Rail.

6. (a) The Contractor shall, if so required, furnish documentary proof to establish that the percentage of the contract price specified by him in paragraph 2 has actually been remitted to another country and the rate of exchange at which that was done.
(b) Whenever the Contractor is required to remit the whole or portion of the contract price, to another country as contemplated in the proviso to paragraph 2 above, he shall notify Transnet Freight Rail forthwith and furnish documentary evidence of such remittance and of the rate of exchange at which that was done.

7. Invoices in respect of goods supplied must reflect the amount remitted or to be remitted to another country and the amount to be retained in South Africa.

8. **The contractor shall take out forward cover for all imported materials and services within 14 days of award of the contract. Proof shall be submitted to the Project Manager/Manager in charge of the contract. The cost of forward**

cover shall be invoiced separate from the contract invoices and shall not be included in the tender price.

SIGNATURE OF TENDERER

DATE: _____

WITNESSES:

1. _____

2. _____

ADDRESS: _____

PRIEVIEW COPY ONLY



Record of Addenda to tender documents

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed

Date

Name

Position

Tenderer

Curriculum Vitae of Key Personnel

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional registration number:	
Name of employer (firm):	
Current Position:	Years with the firm:
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to required service	
Certification:	
I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.	
_____	_____
<i>[Signature of person named in schedule]</i>	Date

Certificate of Authority for Joint Ventures

This Returnable Schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise Mr/Ms
 , authorised signatory of the company
 , acting in the capacity of lead partner, to
 sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature. Name Designation
		Signature. Name Designation
		Signature. Name Designation
		Signature. Name Designation

PREVIEW COPY ONLY





Transnet Supplier Declaration/Application

The Financial Director or Company Secretary

Transnet Vendor Management has received a request to load your company on to the Transnet vendor database. Please furnish us with the following to enable us to process this request:

1. Complete the "Supplier Declaration Form" (SDF) on page 2 of this letter
2. **Original** cancelled cheque **OR** letter from the bank verifying banking details (**with bank stamp**)
3. **Certified** copy of Identity document of Shareholders/Directors/Members (where applicable)
4. **Certified** copy of certificate of incorporation, CM29 / CM9 (name change)
5. **Certified** copy of share Certificates of Shareholders, CK1 / CK2 (if CC)
6. A letter with the company's letterhead confirming physical and postal addresses
7. **Original** or **certified** copy of SARS Tax Clearance certificate and Vat registration certificate
8. A signed letter from the Auditor / Accountant confirming most recent annual turnover and percentage black ownership in the company **AND/OR** BBBEE certificate and detailed scorecard from an accredited rating agency (SANAS member).

NB:

- **Failure to submit the above documentation will delay the vendor creation process.**
- *Where applicable, the respective Transnet business unit processing your application may request further information from you. E.g. proof of an existence of a Service/Business contract between your business and the respective Transnet business unit etc.*

IMPORTANT NOTES:

- a) **If your annual turnover is less than R5 million**, then in terms of the DTI codes, you are classified as an Exempted Micro Enterprise (EME). If your company is classified as an EME, please include in your submission, a signed letter from your Auditor / Accountant confirming your company's most recent annual turnover is less than R5 million and percentage of black ownership and black female ownership in the company **AND/OR** BBBEE certificate and detailed scorecard from an accredited rating agency (e.g. permanent SANAS Member), should you feel you will be able to attain a better BBBEE score.
- b) **If your annual turnover is between R5 million and R35million**, then in terms of the DTI codes, you are classified as a Qualifying Small Enterprise (QSE) and you claim a specific BBBEE level based on any 4 of the 7 elements of the BBBEE score-card, please include your BEE certificate in your submission as confirmation of your status.
NB: BBBEE certificate and detailed scorecard should be obtained from an accredited rating agency (e.g. permanent SANAS Member).
- c) **If your annual turnover is in excess of R35million**, then in terms of the DTI codes, you are classified as a Large Enterprise and you claim a specific BEE level based on all seven elements of the BBBEE generic score-card. Please include your BEE certificate in your submission as confirmation of your status.
NB: BBBEE certificate and detailed scorecard should be obtained from an accredited rating agency (permanent SANAS Member).
- d) **To avoid PAYE tax being automatically deducted from any invoices received from you**, you must also contact the Transnet person who lodged this request on your behalf, so as to be correctly classified in terms of Tax legislation.
- e) Unfortunately, **No payments can be made to a vendor** until the vendor has been registered, and no vendor can be registered until the vendor application form, together with its supporting documentation, has been received and processed.
- f) **Please return the completed Supplier Declaration Form (SDF) together with the required supporting documents mentioned above to the Transnet Official who is intending to procure your company's services/products in order that he/she should complete and Internal Transnet Departmental Questionnaire before referring the matter to the appropriate Transnet Vendor Master Office.**

Regards,

Transnet Vendor/Supplier Management *[please substitute this with your relevant Transnet department before sending this document out]*



Supplier Declaration Form

Company Trading Name							
Company Registered Name							
Company Registration Number Or ID Number If A Sole Proprietor							
Form of entity	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor	
VAT number (if registered)							
Company Telephone Number							
Company Fax Number							
Company E-Mail Address							
Company Website Address							
Bank Name				Bank Account Number			
Postal Address						Code	
Physical Address						Code	
Contact Person							
Designation							
Telephone							
Email							
Annual Turnover Range (Last Financial Year)		< R5 Million	R5-35 million		> R35 million		
Does Your Company Provide		Products	Services		Both		
Area Of Delivery		National	Provincial		Local		
Is Your Company A Public Or Private Entity			Public		Private		
Does Your Company Have A Tax Directive Or IRP30 Certificate			Yes		No		
Main Product Or Service Supplied (E.G.: Stationery/Consulting)							

BEE Ownership Details					
% Black Ownership		% Black women ownership		% Disabled person/s ownership	
Does your company have a BEE certificate			Yes	No	
What is your broad based BEE status (Level 1 to 9 / Unknown)					
How many personnel does the firm employ		Permanent		Part time	

Transnet Contact Person					
Contact number					
Transnet operating division					

Duly Authorised To Sign For And On Behalf Of Firm / Organisation			
Name		Designation	
Signature		Date	

Stamp And Signature Of Commissioner Of Oath			
Name		Date	
Signature		Telephone No.	

NB: Please return the completed Supplier Declaration Form (SDF) together with the required supporting documents mentioned above to the Transnet Official who is intending to procure your company's services/products.



2. VENDOR TYPE OF BUSINESS

(Please tick as applicable)

(* - Minimum requirements)

2.1 Indicate the business sector in which your company is involved/operating:

Agriculture		Mining and Quarrying	
Manufacturing		Construction	
Electricity, Gas and Water		Finance and Business Services	
Retail, Motor Trade and Repair Services		Wholesale Trade, Commercial Agents and Allied Services	
Catering, accommodation and Other Trade		Transport, Storage and Communications	
Community, Social and Personal Services		Other (Specify)	
Principal Business Activity *			
Types of Services Provided			
Since when has the firm been in business?			

2.2 What is your company's annual turnover (excluding VAT)? *

<R20k	>R20k <R0.3m	>R0.3m <R1m	>R1m <R5m	>R6m <R10m	>R11m <R15m	>R16m <R25m	>R26m <R30m	>R31m <R34m	>R35m

2.3 Where are your operating/distribution centres situated *

3. VENDOR OWNERSHIP DETAIL

(Please tick as applicable)

(* - Minimum requirements)

3.1 Did the firm previously operate under another name? *

YES		NO	
-----	--	----	--

3.2 If Yes state its previous name:*

Registered Name	
Trading Name	



3.3	Who were its previous owners / partners / directors?*	
SURNAME & INITIALS		ID NUMBERS

3.4	List Details of current partners, proprietors and shareholders by name, identity number, citizenship, status and ownership as relevant: *							
SURNAME & INITIALS	IDENTITY NUMBER	CITI-ZENSHIP	HDI	DIS - ABLED	GENDER	DATE OF OWNERSHIP	% OWNED	% VOTING

3.5	List details of current directors, officers, chairman, secretary etc. of the firm: *					
SURNAME & INITIALS	IDENTITY NUMBER	TITLE	DIS - ABLED	GENDER	% OF TIME DEVOTED TO THE FIRM	CONTACT NUMBER

3.6	List details of firms personnel who have an ownership interest in another firm: *				
SURNAME & INITIALS	IDENTITY NUMBER	NAME & ADDRESS OF OTHER FIRM	TITLE IN OTHER FIRM	% OWNED	TYPE OF BUSINESS OF OTHER FIRM

4. VENDOR DETAIL

(Please tick as applicable) (* - Minimum requirements)

4.1	How many personnel does the firm employ? *					
	BLACK	WHITE	COLOURED	INDIAN	OTHER	TOTAL
Permanent						
Part Time						



4.1.1	In terms of above kindly provide numbers on women and disabled personnel? *					
	BLACK	WHITE	COLOURED	INDIAN	OTHER	TOTAL
Women						
Disabled						

4.2	Provide Details of Contact Person/s Responsible for Broad Based Black Economic Empowerment (BBBEE) in the Company *			
	SURNAME	INITIALS	DESIGNATION	TELEPHONE NO.

4.2.1	Is your company a value adding supplier (i.e. registered as a vendor under the VAT Act of 1991, where NPAT + total labour cost > 25% of total revenue)?		
YES		NO	

4.2.2	Is your company a recipient of Enterprise Development Contributions?*		
YES		NO	

4.2.3	May the above mentioned information be shared and included in Transnet Supplier Database for future reference? *		
YES		NO	

4.2.4	If you are successful in the tender/contract (where applicable) and this is awarded to your company / organisation, will this have a positive impact on your employment plans? *		
YES		NO	

4.2.5	If yes (above) kindly provide the following information:					
	BLACK	WHITE	COLOURED	INDIAN	OTHER	TOTAL
Permanent						
Part Time						

4.2.6	In terms of above kindly provide numbers on woman and disabled personnel:					
	BLACK	WHITE	COLOURED	INDIAN	OTHER	TOTAL
Women						
Disabled						

4.2.7	Are any of your members/shareholders/directors ex employees of Transnet?		
YES		NO	

4.2.8	Are any of your family members employees of Transnet?		
YES		NO	

4.2.9	If Yes to points 4.2.7 & 4.2.8, list details of employees/ex-employees				
SURNAME & INITIALS	IDENTITY NUMBER	NAME & ADDRESS OF OTHER FIRM	TITLE IN OTHER FIRM	% OWNED	TYPE OF BUSINESS OF OTHER FIRM



Internal Transnet Departmental Questionnaire (for office use only)

Section 1: To be completed by the Transnet Requesting / Sourcing Department

TFR		TRE		TPT		TPL		TNPA		TRN	
Create		Amend		Block		Unblock		Once-Off / Emergency			
Extend		Delete		Undele							

Supplier's trading name			
Supplier's registered name			
Please indicate if the Supplier has a contract with sourcing Transnet OD	Yes		No
If yes please submit a copy of the letter of award			

a) What is being procured from the supplier?

i. Products only	Yes		No	
ii. Services only	Yes		No	
iii. Labour only	Yes		No	
iv. Mix of services and products	Yes		No	
v. Mix of services and labour	Yes		No	

b) If your answer is **YES** to questions II, III, IV or V in paragraph **a)** above, please indicate whether the relevant **PAYE questionnaires** have been forwarded to the appropriate **Transnet Operational Divisions'** decision making bodies / **Strategic Supply Management** team for a directive /decision on tax withholding from payments to this supplier.

Yes		No	
-----	--	----	--

c) If your reply to (b) is **"NO"**, please furnish reasons :

d) Certification and Approval of proposed Vendor Creation/Unblocking/Other Changes by Transnet Official with Appropriate Delegated Authority :

I HEREBY CERTIFY THAT THE TRANSNET DETAILED PROCUREMENT PROCESS (DPP) / PROCUREMENT MECHANISM HAS IN ALL RESPECTS BEEN ADHERED TO AND I THEREFORE APPROVE THE PROPOSED VENDOR CREATION/APPROVAL/OTHER CHANGES TO BE EFFECTED ON THE VENDOR MASTER

Name	Grade	Date								Signature
		Y	Y	Y	Y	M	M	D	D	

Tel No:		Fax	
---------	--	-----	--

Section 2: To be completed by the BEE Department (this section is for Confirmation/Determining of BEE Status)

NARROW BASED (NB)				BROADBASED (BBBEE)										
BEE O/S	BWBE	DPBE	MR	CONTR. LEVEL	EME: <R5m	QSE: >R5m <R35m	LARGE: >R35m	VALIDITY DATE						
Name				Grade		Date				Signature				
						Y	Y	Y	Y	M	M	D	D	
						Y	Y	Y	Y	M	M	D	D	

TECHNICAL DATA SHEETS TO SPECIFICATIONS

(To be filled in by the Tenderer)

1.0 **BBB0041: PREPARATION OF DRAWINGS FOR TRANSNET FREIGHT RAIL INFRASTRUCTURE.**

1.1 CAD Software: _____

2.0 **BBB0496: 3KV RECTIFIER**

2.1 Make and Manufacturer: _____

2.2 Number of diodes per branch: _____

2.3 Type of Diode: _____

2.4 Full load current rating of diode. I_{FRMS} : _____

2.5 Average current rating of diode I_{FAVM} : _____

2.6 Repetitive Peak Reverse Voltage of diode: _____

2.7 Surge forward current 10milli seconds Sine Wave: _____

2.8 Method of cooling of rectifier: _____

2.9 Method of temperature sensing: _____

2.10 Type of insulation used for frame to the floor: _____

2.11 Physical dimensions of rectifier unit Height: _____ Breadth: _____ Width: _____

2.12 Names of suppliers where rectifier diodes can be sourced: _____

2.13 Method of correct torque adjustment for heat sinks: _____

3.0 **BBB0845: HIGH VOLTAGE METAL OXIDE SURGE ARRESTORS**

3.1 Type and make _____

3.2 Manufacturer of equipment _____

3.3 Protection voltage rating of lightning surge _____ kV

3.4 Impulse discharge current rating of lightning surge protectors _____ kA

3.5 Make and type of protection against switching surges _____

4.0 **BBB0937: CURRENT TRANSFORMERS (88kV)**

4.1 **DESIGN DETAIL**

4.1.1 Manufacturers name: _____

4.1.2 Highest voltage for equipment: _____ kV

- 4.1.3 Nominal r.m.s voltage: _____ kV
- 4.1.4 Rated insulation level: _____ kV
- 4.1.5 Rated frequency: _____ Hz

4.2 DETAIL OF CURRENT TRANSFORMERS.

MEASURING CURRENT TRANSFORMERS

- 4.2.1 Transformation ratio: _____
- 4.2.2 Rated secondary current: _____ Ampere
- 4.2.3 Rated secondary current: _____ Ampere
- 4.2.4 Accuracy class: _____
- 4.2.5 Rated Burden: _____ VA
- 4.2.6 Rated short-time current: _____ kA for _____ seconds

PROTECTION CURRENT TRANSFORMERS

- 4.2.7 Transformation ratio: _____
- 4.2.8 Rated primary current: _____ Ampere. Rated secondary current: _____ Ampere
- 4.2.9 Rated secondary current: _____ Ampere
- 4.2.10 Accuracy class: _____
- 4.2.11 Rated Burden: _____ VA
- 4.2.12 Rated short-time current: _____ kA for _____ seconds

5.0 BBB1267: OUTDOOR HIGH VOLTAGE AC CIRCUIT BREAKERS

- 5.1 Make and manufacturer: _____
- 5.2 Rated Voltage: _____ kV.
(Highest rated voltage for equipment)
- 5.3 Rated Insulation level: _____ kV.
(Rated lightning withstand Voltage)
- 5.4 Number of poles: _____
- 5.5 Rated short circuit breaking current: _____ kA.
- 5.6 Rated normal current: _____ A.
- 5.7 Breaker operating time:
 - 5.7.1 Closing: _____ ms.
 - 5.7.2 Opening: _____ ms.
- 5.8 Number of operations after which breaker contact maintenance / measurement is required:



5.8.1 Under full load conditions _____

5.8.2 Under fault conditions _____

5.9 First Pole to Clear Factor _____

5.10 DC control voltage: _____ V

6.0 BBB2502: BATTERY AND BATTERY CHARGER

6.1 BATTERY

6.1.1 Manufacturer _____

6.2 BATTERY CHARGER:

6.2.1 Manufacturer _____

6.2.2 Supply voltage: _____

6.2.3 Ampere hour rating: _____

6.2.4 Construction:

Floor mounted: _____ YES / NO Wall mounted: _____ YES / NO

7.0 BBB2721: SUBSTATION PANELS

7.1 Manufacturer: _____

7.2 Single AC primary circuit breaker control panel. _____ YES/NO

7.3 Single AC/DC distribution panel. _____ YES/NO

7.4 Combination of 1.1 and 1.2 into one panel. _____ YES/NO

7.5 DC earth leakage relay:
Fitted inside panel / external to panel. _____

7.6 Nameplate of substation to be fitted on the panel. _____

8.0 BBB3005: 3kV DC UNDER VOLTAGE RELAY

8.1 Type (BBB3005 clause 2.0) _____

8.2 Encapsulated Voltage Divider: _____ YES / NO

If Yes – Type of Resistors: _____

9.0 WAVE FILTER

9.1 BBB3139: Capacitors

9.1.1 Capacitance Value (C_N): _____

9.1.2 Capacitance Tolerance: _____

9.1.3 Detailed Description of Capacitor: _____

9.1.4 Overall Mass of the Capacitor: _____

9.1.5 Overall Dimensions of the Capacitor: _____



9.1.6 Dielectric Insulating Medium: _____

9.1.7 Container Material: _____

9.1.8 Rated Current in RMS (I_N): _____

9.1.9 Rated Voltage in RMS (U_N): _____

9.1.10 Rated Output (Q_N): _____

9.1.11 Temperature Category: _____

9.1.12 Maximum Permissible AC Current: _____

9.1.13 Maximum Permissible AC Voltage: _____

9.1.14 Maximum Permissible Temperature: _____

9.1.15 Capacitor Losses: _____

9.1.16 Active Power: _____

9.1.17 Steady State Condition: _____

9.1.18 Residual Voltage: _____

9.1.19 BIL (Bushing): _____

9.1.20 Life Expectancy: _____

9.2 BBB3162: Inductors

9.2.1 Inductor Tolerance (mH) at operational frequencies: _____

9.2.2 Max Nominal Inductance at operational frequencies: _____

9.2.3 Number of Turns (N): _____

9.2.4 Rated Peak Current in Amperes (I): _____

9.2.5 Rated DC Current in Amperes (I_N): _____

9.2.6 Overall Mass of the Inductor (kg): _____

9.2.7 Overall Dimensions of the Inductor (mm): _____

9.2.8 Max Ambient Temperature in °C (T_a): _____

9.2.9 Max Surface Temperature in °C (T_s): _____

9.2.10 Maximum Permissible Operational Temperature in °C: _____

9.2.11 Maximum Permissible AC Current in Amperes: _____

9.2.12 Maximum Permissible AC Voltage in Volts: _____

9.2.13 Maximum Energy Stored in Inductor at rated peak current (I): _____

10.0 BBB3890: 3kV REACTOR

10.1 Manufacturers name: _____

10.2 Inductance _____



10.3 Continuous Current rating _____

11.0 BBB4724: POSITIVE ISOLATOR

11.1 Manufacturers name: _____

11.2 Continuous Current rating for:

11.2.1 Positive Isolator switch: _____

11.2.2 Positive Isolator Earthing switch: _____

11.3 Mechanical Interlocking System Type (BBB4724 clause 6.17) _____

12.0 BBB5019: MAIN TRACTION TRANSFORMER

12.1 Manufacturers name _____

12.2 TRANSFORMER DETAIL

12.2.1 Primary voltage rating: _____ kV

12.2.2 Secondary voltage rating: _____ kV

12.2.3 Rated power: _____ MVA

12.2.4 Impedance %: _____

12.2.5 Off circuit tap switch:

No of positions: _____ %Steps: _____

12.2.6 Vector group: _____

12.3 TANK AND TANK COVER

12.3.1 Free-breathing: _____ Yes/No

12.3.2 Tank cover bolted to tank: _____ Yes/No

12.3.3 Radiators galvanised: _____ Yes/No

12.3.4 Method of Cooling: _____

12.3.5 Overall dimensions: Length _____ mm. Breadth _____ mm. Height _____ mm.

12.3.6 Winding material: HV _____ LV _____

12.3.7 Mass of core and windings: _____ kg

12.3.8 Oil capacity: _____ (Litres)

12.3.9 Mass of transformer complete with oil: _____ kg

12.3.10 Adjustable axial coils provided: _____ Yes/No

12.3.11 Type of breather and dehydrating agent _____

The following information refers to the transformer when connected on the principal tapping and appropriate reference temperature for the class of insulation used.

12.3.12 Iron loss (Watts) : _____

- 12.3.13 Copper loss at full load: _____ at _____ °C
- 12.3.14 Total load losses (Watts): _____ at _____ °C
- 12.3.15 Impedance at full load (%Z): _____
- 12.3.16 Reactance (% X): _____
- 12.3.17 Regulation at full load at: 1.0 PF _____ Percent, 0.8 PF _____ Percent at _____ °C
- 12.3.18 Efficiency at full load at: 1.0 PF _____ Percent, 0.8 PF _____ Percent at _____ °C
- 12.3.19 Temperature rise at rated voltage and power of:
 Windings: _____ °C
 Top oil : _____ °C

13.0 BBB8204: AUXILLARY TRANSFORMER

- 13.1 Manufacturers name: _____
- 13.2 TRANSFORMER DETAIL
- 13.2.1 Type of transformer: Outdoor _____ Indoor: _____
- 13.2.2 Number of phases: Single phase _____ Three phase: _____
- 13.2.3 Rated power: _____ kVA
- 13.2.4 Impedance %: _____
- 13.2.5 Primary voltage rating: _____ kV
- 13.2.6 Secondary voltage rating: _____ kV
- 13.2.7 Tapping switch.
 No of positions: _____ %Steps: _____
- 13.2.8 Vector group: _____
- 13.2.9 Free Breathing: _____ Yes/No
- 13.2.10 Sealed _____ Yes/No
- 13.2.11 Welded cover: _____ Yes/No
- 13.2.12 Method of Cooling: _____
- 13.2.13 Overall dimensions: Length _____ mm. Breadth _____ mm. Height _____ mm
- 13.2.14 Winding material: HV _____ LV _____
- 13.2.15 Mass of core and windings : _____ kg
- 13.2.16 Oil capacity: _____ (Litres)
- 13.2.17 Mass of transformer complete with oil: _____ kg

PREVIEW COPY ONLY



- 13.2.18 HV end turns insulation reinforced Yes/No
- 13.2.19 Type of breather and dehydrating agent: _____
The following information refers to the transformer when connected on the principal tapping and appropriate reference temperature for the class of insulation used.
- 13.2.20 Iron loss (Watts) : _____
- 13.2.21 Copper loss at full load: _____ at _____ °C
- 13.2.22 Total load losses (Watts): _____ at _____ °C
- 13.2.23 Impedance at full load (percentage) _____ Z _____ X
- 13.2.24 Regulation at full load at: 1.0 PF _____ Percent, 0.8 PF _____ Percent at _____ °C
- 13.2.25 Efficiency at full load at: 1.0 PF _____ Percent, 0.8 PF _____ Percent at _____ °C
- 13.2.26 Temperature rise at rated voltage and power of:
Windings: _____ °C
Top oil: _____ °C

14.0 BBB7842: HIGH VOLTAGE AC DISCONNECTOR AND EARTHING SWITCH

	DISCONNECTOR	EARTHING SWITCH
14.1	Name of manufacturer.	.....
14.2	Type number	.....
14.3	Number of poles.	.....
14.4	Indoor/Outdoor.	.....
14.5	Rated voltage.	.....
14.6	Rated insulation level.	.....
14.6.1	Rated 1 minute power frequency withstand voltage.	.....
14.6.2	Rated lightning impulse withstand voltage.	.....
14.7	Rated frequency.	.....
14.8	Rated normal current.	.....
14.9	Rated short circuit making current	.....
14.10	Rated short time withstand current	.....
14.11	Mass of complete unit.	.....
14.12	Minimum clearance in air:	
14.12.1	Between poles.	.....
14.12.2	To earth.	.....
14.12.3	For isolating distance.	.....



- 14.13 Type of closing mechanism.
- 14.14 Height above ground of lowest HV connection.....
DISCONNECTOR EARTHING WITCH
- 14.15 Length of insulator (taut string measurement)
- 14.16 Type test certificate
- 14.16.1 Testing authority
- 14.16.2 Test number
- 14.17 Insulators:
- 14.17.1 Type test certificate number
- 14.17.2 Testing authority

15.0 CEE.0099.2005: 3kV DC HIGH SPEED CIRCUIT BREAKERS

- 15.1 Make and manufacturer: _____
- 15.2 Experience with tendered design of breaker: (CEE.0099.2002 Clause 9.1.3)

<u>NUMBER SUPPLIED</u>	<u>WHERE INSTALLED</u>	<u>DATE SUPPLIED</u>

- 15.3 Continuous current rating of breaker : _____
- 15.4 Rated voltage of breaker : _____
- 15.5 Mechanically latched Yes/No. _____
- 15.6 Magnetically latched Yes/No. _____
- 15.7 Main contact material _____
- 15.8 Arcing contacts fitted Yes/No. _____
- 15.9 Contact material of main contact (or arcing contact, if fitted)

16.0 AUTOMATIC CHANGE-OVER

- 16.1 Make and manufacturer: _____
- 16.2 Physical dimensions and operating mass of unit:
Length _____ mm. Height _____ mm.
Depth _____ mm. Mass _____ mm
- 16.3 Material of cabinet _____



- 16.4 Manufacturer and type of miniature circuit breakers _____
- 16.5 Maximum continuous current rating of circuit breakers _____
- 16.6 Manufacturer and type of contactors _____
- 16.7 Maximum continuous current rating of contactors _____ Amps
- 16.8 Manufacturer and type of change-over timers _____
- 16.9 Timing range of timers _____ Seconds
- 17.0 STEEL ROLL-UP DOORS**
- 17.1 Make and manufacturer _____

TENDERER'S SIGNATURE DATE:

PRIEVIEW COPY ONLY

