

**ETC plus SA**  
Ul. Drukarska 14  
27-400 Ostrowiec Św  
Poland

1 March 2010

**Attention: Mr Zbigniew Łęgosz- Dział Systemów Zasilania**  
**Subject: Substations 132/32kV for Power Holding Company of Nigeria**

ETC plus SA was engaged as the Electrical and Instrumentation supplier of Auxiliary AC and DC systems for Substaions 132/33kV during the period September 2005 to November 2009. The scope of works and supplies of equipment made by ETC plus SA comprised the following

**Substation 132/33kV Aloji- Year 2005**

1. Production and delivery 2 sectional 110V DC distribution board with system for checking, the isolation state on outflows
2. Delivery 110V DC battery: 54 x Absolyte 6-90A11-440Ah together with Alpha racks, battery protection box, and load bank R50V2
3. Delivery 110V DC charger ZB110DC100 in tropical version.
4. Pre-installation tests including capacity test, testing of all electrical, control and instrumentation systems, point to point wire check, I/O checkout and equipment setting.

**Substation 132/33kV Umuahia- Year 2007**

5. Production and delivery 2 sectional 110V DC distribution board with system for checking, the isolation state on outflows
6. Delivery 2 x 110V DC batteries: each battery 53 x Sonnenschein A602/420 499Ah- together with Alpha racks, battery protection boxies, and load bank R50V2
7. Delivery 2 x 110V DC chargers ZB110DC100 in tropical version.
8. Production and delivery: Cable boxies Z1- 8 pcs, and Junction boxies – 24 pcs
9. Pre-installation tests including capacity test, testing of all electrical, control and instrumentation systems, point to point wire check, I/O checkout and equipment setting.

**Substation 132/33kV Nnewi Year 2009**

10. Production and delivery 2 sectional 110V DC distribution board with earth fault detectors MD08
11. Delivery 415V AC-240V AC distribution board with trafo connection boxies
12. Delivery 110V DC battery: 53 x Sonnenschein A602/350 416Ah- together with Alpha racks, battery protection box.
13. Delivery 2 x 110V DC chargers ZB110DC150 in tropical version.
14. Delivery 48V DC battery: 24 x Sonnenschein A602/300 337Ah- together with Alpha racks, and battery protection box
15. Production and delivery 2 sectional 48V DC distribution board with earth
16. Delivery 2 x 48V DC chargers ZB48DC100 in tropical version.
17. Pre-installation tests including capacity tests, testing of all electrical, control and instrumentation systems, point to point wire check, I/O checkout and equipment setting.
18. Packing all equipment , and sea transport to Lagos.

ETC plus SA executed their work in a professional manner, contributed to the successful performance of the Auxiliary AC and DC systems , and is recommended for future work of a similar nature.

Sincerely Yours

  
**Bonny Odiri**  
Chief Executive Officer  
For Valenz Holdings Ltd.