



**COMMISSIONING REPORT OF 168.5 MVA, 2X10.5/345 TRANSFORMER AT AFAM  
POWER PLANT, RIVERS STATE**

**CUSTOMER: AFAM POWER PLANT PLC**

**EQUIPMENT: GENERATION TRANSFORMER**

**RATING: 168.5MVA,345KV/2X10.5KV**

**MAKE: BBC**

**SERIAL NUMBER: GM100593 (Mfg ref no. GM100592)**

**YEAR OF MANUFACTURE:**

**DATE OF COMMISSIONING: 08.05.2017**

**COMMISSIONING DETAILS:**

**Erection**

- Transformer was fully erected with fixing of all the accessories including 1 nos radiator bank, 24 nos radiators, conservator tank, 3 nos HV bushing turrets, 3 nos HV bushings, all connecting pipes, silica gel breather and buchholz relay.

All these were carefully cleaned, tested and found satisfactory for erection.

**Transformer Processing**

- The transformer, which was transported with nitrogen gas from works, was intermittently processed with vacuuming before oil filling to prevent moisturization of the core and windings.
- The oil was externally filtered from the transformer to attain a single ppm digit before introducing into the transformer.
- The transformer oil was filtered for 48 hours with a 6kl/hour filtration machine to achieve optimum result and only stopped after single digit ppm value was achieved.
- Proper bleeding from aerating plugs was carried out to let out air traps in the transformer.

**Pre-commissioning Checks**

-All alarms and trips, WTI&OTI, controls, cooling systems, sensors, etc, were carefully checked by GTA Engineering and confirmed by Afam power plant plc.

-Transformer was checked for oil leakages and all was found satisfactory.

- As per IEC requirements and standards, the transformer was tested by GTA Engineering testing team and all results were found accurately satisfactory.

**Transformer Commissioning**

Having found the above stated processes satisfactory and in tandem with global acceptable standards, the transformer was energized from the 345 KV side on 10-05-2017 at exactly 3:30 pm.

The humming sound was found to be within acceptable decibels

**GTA**

GTA Engineering Nigeria Ltd

Afar

*[Handwritten signature]*

P. Subramanian

Engr. O.N Obademi

COO/DVP

MD

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11/5/17

Prafull Kr. Jha

*[Handwritten signature]*  
11/5/17

Engr Uzoh K.S.

Head, Repair section

GM MAINT.

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Nkanang, Uwem E.

Mr Udo Ibeh

Service Engr.

HOD Mechanical Dept.

MANAGING DIRECTOR / CEO.  
PHEN, AFAM POWER PLC  
SIGN. *[Signature]*  
DATE: 11/05/2017