



INSPECTION REPORT

Project: XXXXX

Date: 23/08/2012

Supplier: XXXXX

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Client:	XXXXX
Client's Mission Order No.:	-
Inspecteam Hydro Project No.:	XXXXX
Inspector's Name:	XXXXX
Report date:	23/08/2012
Report No.:	01

INSPECTION INFORMATION:	
PO No.:	XXXXX
Materials Inspected:	Power Transformer
Date(s) of Visit(s):	August 21 st , 22 nd and 23 rd ; 2012
Date of Previous Visit:	N/A
Date of Next Scheduled Visit:	N/A
P. O. Status:	<input checked="" type="checkbox"/> Complete <input type="checkbox"/> Incomplete

SUPPLIER/SUB-SUPPLIER DATA:	
Supplier:	XXXXXX
Location:	XXXXXX
Primary Contact:	XXXXXX
Phone:	XXXXXX
E-mail :	XXXXXX

INSPECTION SUMMARY AND CONCLUSION:

The purpose of this Inspection has been to carry out the the FAT test to one transformer XXXXX destined to the HPP XXXXX project XXXXX

All the points from 1 to 16 included in the Factory Acceptance Test Proposal prepared by Mr. XXXXX (10.07.2012) have been covered satisfactorily.

From the before said Factory Acceptance Test Proposal, the points 2, 3, 4, 5 and 13 have been a Review of the Testing Certificates and the points 6, 7, 8, 9, 10, 11, 12, 14, and 15 have been Witnessed.

Apart from that, points 1 and 16 have been also a Review.

Remark: Points 2, 3, 4, 5 and 13 have not been witnessed because they were carried out on the 21st in the morning before my arrival to the factory. XXXXX accepted not to have to repeat this tests that were not witnessed.

RECOMMENDED ACTION:	
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INSPECTION RESULT:	<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Non-conformance(s)	<input type="checkbox"/> Other/Explain:
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1. ATTENDEES

NAME	COMPANY REPRESENTED	TITLE
XXXXX	XXXXX	Sales and Project Management
XXXXX	XXXXX	Verkauf and Projectleitung
XXXXX	XXXXX	Sales Manager
XXXXX	XXXXX	Laboratory Manager
XXXXX	Inspecteam Inspector on behalf of XXXXX	Inspector

2. MATERIAL INSPECTED

PRODUCT / MATERIAL / ITEM NAME	ORDERED QUANTITY	PRESENTED THIS VISIT	ACCEPTED THIS VISIT	ACCEPTED TO DATE
Transformer XXXXX	1	1	1	23-Aug-2012

3. DOCUMENTS USED

DOCUMENT No.	ISSUE DATE Rev.	TITLE	APPROVAL STATUS
Not Numbered	(10.07.2012)	Factory Acceptance Test Proposal prepared by Mr. XXXXX (10.07.2012)	-
XXXXX (Review)		Technical Specification for Step Up Transformer	-

4. SCOPE OF INSPECTION

ITP ACTIVITY	ITEMS	RESULT
Factory Acceptance	Transformer XXXXX	Satisfactory

5. EQUIPMENT AND INSTRUMENTATION USED (TO BE SUPPLIED BY SUPPLIER)

See Attachment 1 to this Inspection Report.



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6. INSPECTION DETAILS

6.1 Introduction

The purpose of this Inspection has been to carry out the FAT test to one transformer XXXXX destined to the HPP XXXXX project in XXXXX.

All the points included in the FAT test have been covered with satisfactory results.

See below the FAT test programme:

FACTORY ACCEPTANCE TESTS - PROPOSAL					
for 1 transformer [REDACTED]					
№	TESTS	APPLICABLE REGULATION OR RULE	PARTICIPATION BY		Test dates
			HHB	CLIENT	
1	Vacuum withstand on tank (R)		H	RR	21.08.2012
2	Measurement of insulation resistance to earth of the windings (R)	IEC 60076-1/00 cl. 10.1.3.1	H	W	21.08.2012
3	Measurement of dissipation factor (tan δ) (R)	IEC 60076-1/00 cl. 10.1.3.1	H	W	21.08.2012
4	Determination of capacitances windings-to-earth, and between windings (R)	IEC 60076-1/00 cl. 10.1.3.b	H	W	21.08.2012
5	Measurement of the electric strength of the transformer oil (R)	IEC 60156/95	H	W	21.08.2012
6	Measurement of winding resistance (R)	IEC 60076-1/00 cl. 10.2	H	W	21.08.2012
7	Measurement of voltage ratio and check of phase displacement (R)	IEC 60076-1/00 cl. 10.3	H	W	21.08.2012
8	Measurement of no-load loss and current (R)	IEC 60076-1/00 cl. 10.5	H	W	21.08.2012
9	Determination of sound level (S) - at rated voltage and no load.	IEC 60076-10/01	H	W	21.08.2012
10	Measurement of short-circuit impedance and load loss at extreme tappings and principal tapping (R)	IEC 60076-1/00 cl. 10.4	H	W	21.08.2012
11	Measurement of zero sequence impedance (S)	IEC 60076-1/00 cl. 10.7	H	W	21.08.2012
12	Temperature-rise test (T)	IEC 60076-2/93	H	W	22.08.2012
13	Lightning impulse test (R)	IEC 60076-3/00 cl. 13	H	W	23.08.2012
14	Separate - source voltage withstand test (R)	IEC 60076-3/00 cl. 11	H	W	23.08.2012
15	Induced overvoltage withstand test ACSD (S)	IEC 60076-3/00 cl. 12	H	W	23.08.2012
16	Tank pressure test (with gas) (R)		H	RR/W	23.08.2012
R = Routine test T = Type test RR = Report review S = Special test H = Holding point W = Witness point					

10.07.2012 Prepared by [REDACTED]

The FAT have been carried out during the days August 21st to 22nd and the test reports have been checked on August 23rd.

It is to mention that the testing defined in points 2, 3, 4, 5 and 13 of the FAT test programme have not been a Witness by the Inspecteam Hydro Inspection but a Review of the Test Certificate. The reason for that has been that the testing had begun at 9 am and the Writer arrived at about 12h according to the travel schedule. AECOM accepted not to repeat the test to perform the witness.

Points 6, 7, 8, 9, 10, 11, 12, 14, and 15 of the FAT test programme have been Witnessed.

Points 1 and 16 of the FAT test programme have been also a Review, as it was determined in the said FAT test



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programme.

A visual inspection has been done to the transformer, checking that no defect, cracks, bumps, loose components, deformations, scratches, burrs, loose connections, damaged components, missed components, etc., existed.

Inspection has resulted Satisfactory.

Test Certificates have been signed accordingly.

FAT testing has been performed according to the Document titled "General Guidelines for testing of Power Transformers" attached to this report.

The Transformer has been checked according to the Document "Technical Specification for Step Up Transformer (Review)". This document is attached to this report.

See below,

Tr-r type	[REDACTED]	Contract №	[REDACTED]
Tr-r. №	[REDACTED]	Destination:	[REDACTED]
Project №	[REDACTED]	Standard doc.:	[REDACTED]

RATINGS

Index	Cooling	HV winding	LV winding
Output, kVA	ONAN	11000	11000
Current, A	ONAN	57.7	1008.1
Voltage, kV		110 ± 2 x 2,5 %	6.3
Insulation levels:	line terminals	LI/AC 550/230	LI/AC 60/20
	neutral terminal	LI/AC 250/95	-
Frequency	50 Hz	Type of regulation	Off-circuit
Number of phase	3	Operation duty	continuous
Type of mounting	outdoor	Connection	YNd11

CONCLUSION: The transformer meets the requirements of contract № PO No. [REDACTED] and IEC [REDACTED] for routine tests.



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7. NON-CONFORMANCES

NCR #	DESCRIPTION	DATE RAISED	DATE CLOSED
-	-		

8. ATTACHMENTS TO THIS REPORT

Attachment-1 XXXXX	Calibration Certificates
Attachment-2 XXXXX	Guidelines for testing Power Transformers
Attachment-3 XXXXX	Technical Specification for HPP Plan Temoves Transformer
Attachment-4 IR XXXXX	Testing Certificates
Attachment-5 IR XXXXX	Factory Acceptance Test Certificate

9. PICTURES



Transformer during the FAT tests



Transformer during the FAT tests



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Transformer during the FAT tests



Transformer during the FAT tests



Transformer during the FAT tests



During FAT test



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Transformer during the FAT tests



During FAT test



During FAT test



During FAT test: Measuring the sound level at 0,3 mts



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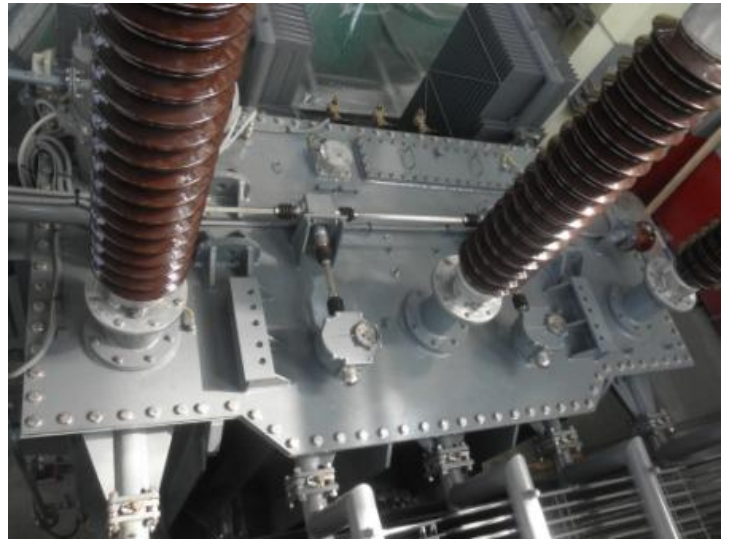
During FAT test: Measuring the sound level at 0,3 mts



During FAT test



Details of the transformer



Details of the transformer



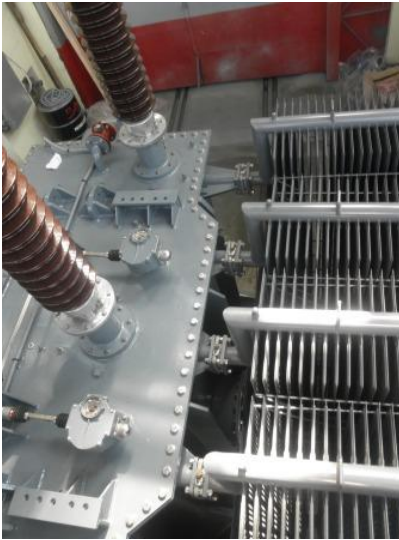
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Details of the transformer



Details of the transformer



Details of the transformer



Details of the transformer

END OF THIS REPORT
INSPECTTEAM SRL INSPECTOR
Mr. XXXXX