

Case History - 18: Using Online Ultrasonic Method

Equipment under Measurement: **1MVA 6.6kV/415V Dry type Transformer**

Date of Measurement: **05th December 2015**

Sensor Used : **Ultrasonic Sensor**

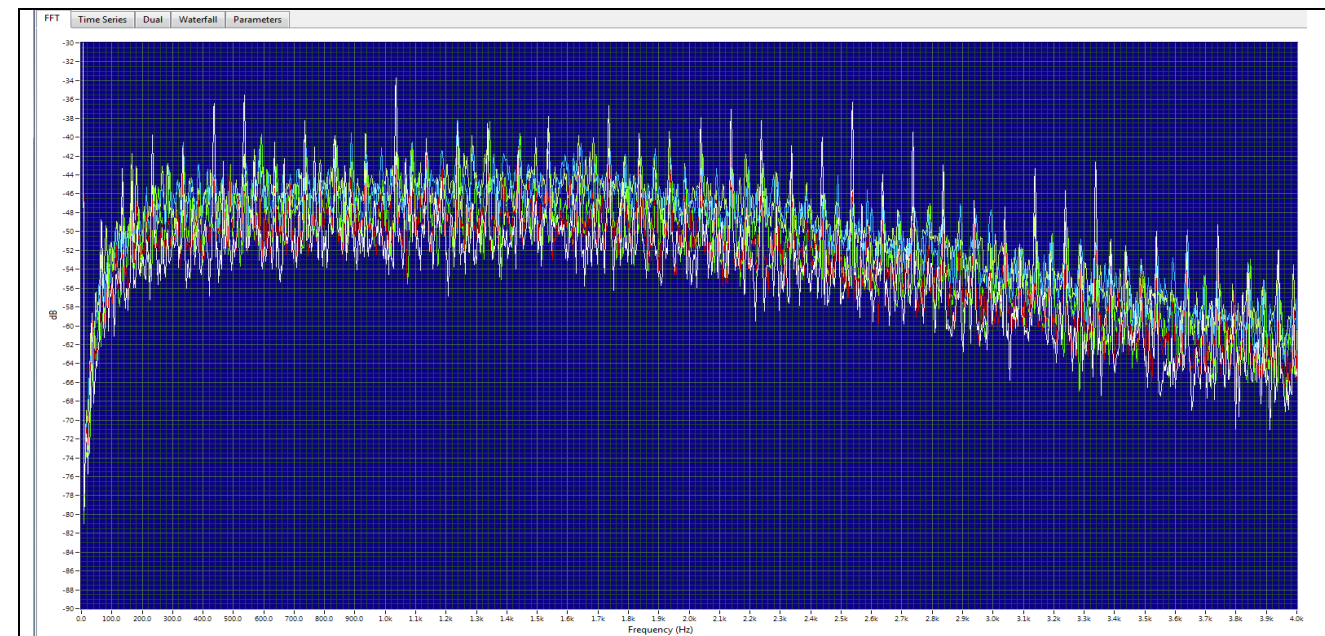
COMPARISON OF ONLINE PD MEASUREMENT (BEFORE AND AFTER SDM) REPORT USING SNAPSHOT ULTRASONIC MEASUREMENT

Client :	A	Identification :	TF	Type :	Dry type	Substation location:	Plant 1 HT Room
Measurement Date :	-	Sensor Used:	Airborne Ultrasonic sensor	Serial No:	5586101	Rating (kVA):	1,000 kVA
Measured By :	Fadzil / Wanti	Measurement type:	Snapshot	Manufacturer /Year:	Shihen Technical Corporation / 1997	Operating Voltage (kV) :	6.6kV/415V
						Air-con :	No

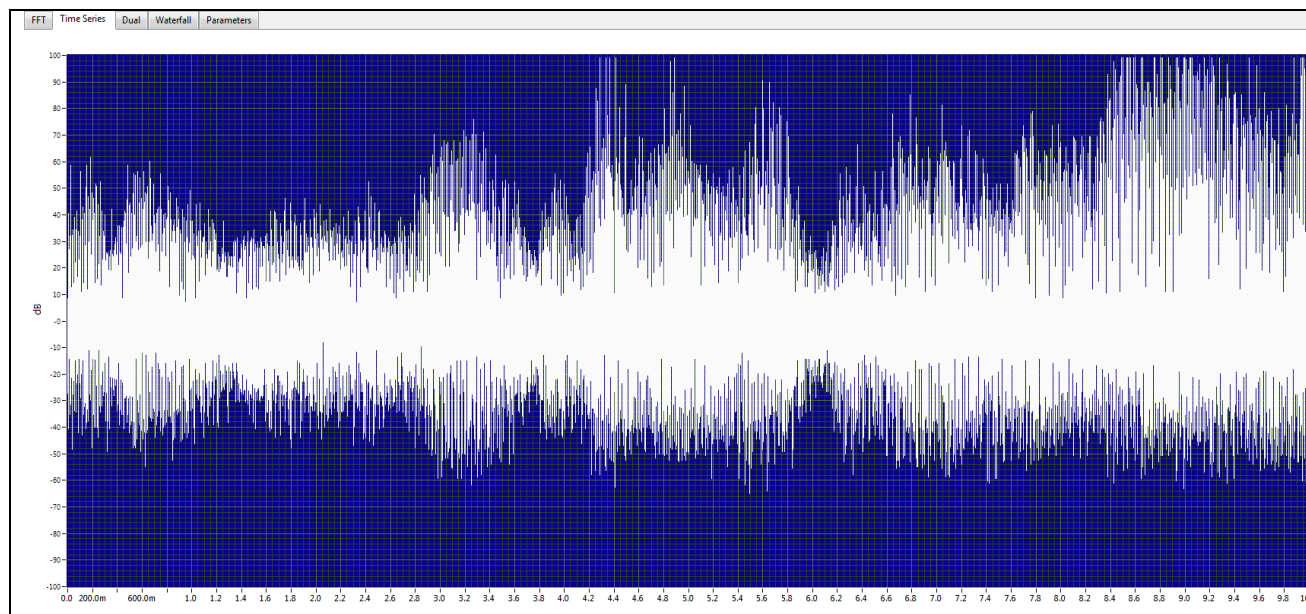
• Frequency Domain Analysis (Before SDM _ Measured on 05 December 2015)



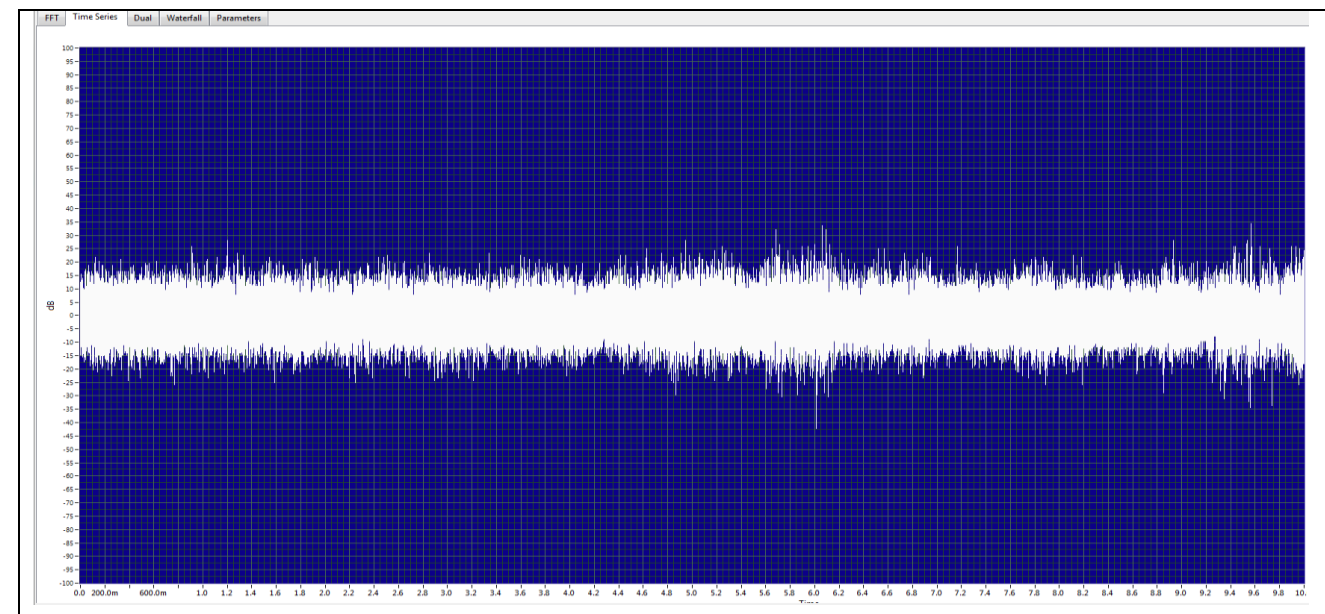
• Frequency Domain Analysis (After SDM _ Measured on 18 December 2015)



• Time Domain Analysis (Before SDM _ Measured on 05 December 2015)



• Time Domain Analysis (After SDM _ Measured on 18 December 2015)



• Audio Analysis => **High level ultrasound was detected.**

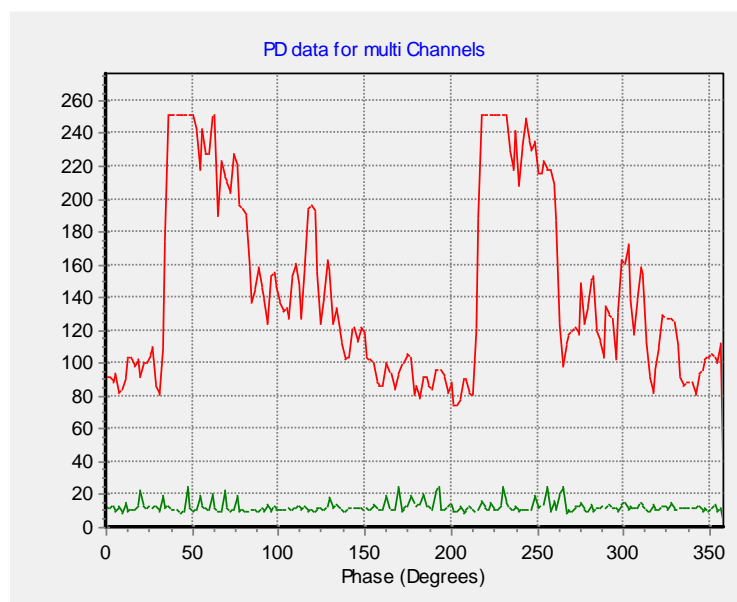
• Audio Analysis => **No Abnormal ultrasound was detected.**

* SDM was done on 12th December 2015.

COMPARISON OF ONLINE PD MEASUREMENT (BEFORE AND AFTER SDM) REPORT USING ULTRASONIC IN PHASE RESOLVED MODE

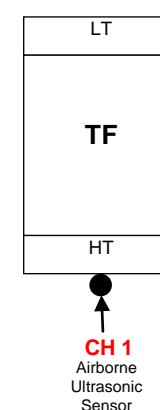
Client : A	Identification : TF	Type : Dry type	Substation location: Plant 1 HT Room
Measurement Date : -	Sensor Used: Airborne Ultrasonic sensor	Serial No: 5586101	Rating (kVA): 1,000 kVA
Measured By : Fadzil / Wanti	Measurement type: Snapshot	Manufacturer /Year: Shihen Technical Corporation / 1997	Operating Voltage (kV) : 6.6kV/415V
			Air-con : No

• Airborne Ultrasonic in Phase Resoled Mode Measurement (Before SDM _ Measured on 05 December 2015)

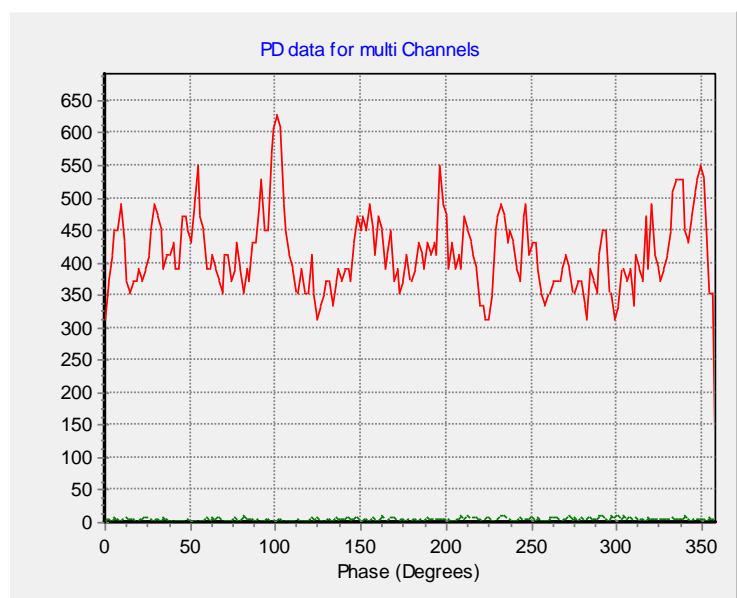


PASS	
FAIL	✓

SENSOR PLACEMENT LAYOUT



• Airborne Ultrasonic in Phase Resoled Mode Measurement (After SDM _ Measured on 18 December 2015)



PASS	✓
FAIL	

■ Panel ultrasound in phase resolved mode
■ Background Noise

* SDM was done on 12th December 2015

OBSERVATION DURING SHUTDOWN MAINTENANCE



*SDM was done on 12th December 2015.