



WMAAC TRANSFORMER SENSOR

USE CASE: Taps Changer Setting

Maintaining 230V to customers is a key responsibility for Electricity Distribution Business.

LV Transformers are built with the ability to adjust the LV output voltage to allow for variation in HV Voltage and in the winter to allow for greater voltage drop on feeder circuits. By law Electricity Distribution Businesses need to maintain customer LV Voltage at 230V +/-6%. A Transformer TAP allows the Power Distribution Companies to adjust LV up and down to achieve their goal of 230V +/-6% at the customer's location.

The WMAAC DTM is designed to continuously monitor the voltage at the transformer and to report under and over voltage events.

	Over Voltage Threshold 1 244V	Over Voltage Threshold 2 250V	Under Voltage Threshold 1 230V	Under Voltage Threshold 2 220V	Under Voltage Threshold 3 200V
20/08/2019	0	0	107	0	0
21/08/2019	0	0	117	0	0
22/08/2019	0	0	109	0	0
23/08/2019	0	0	118	0	0
24/08/2019	0	0	55	0	0
25/08/2019	0	0	0	0	0
26/08/2019	0	0	1	0	0
27/08/2019	0	0	1	0	0
28/08/2019	0	0	5	0	0
29/08/2019	0	0	7	0	0
30/08/2019	0	0	5	0	0

In this case, the transformer was struggling to maintain 230V and with voltage drop down feeders the voltage that the client would see is lower than the transformer. Before the 25th of August the transformer was struggling to maintain 230V through most of the day. On 25th of August the TAP was changed, and the number of under-voltage events dropped markedly.

Understanding the voltages at the transformers and at the corresponding end of line feeders is the only way to ensure customers are getting the voltages they are by legislation guaranteed.

“Power Quality in the responsibility of the EDB”

Steve Jobs?!

For more information please contact Robert at robert.burke@wmac.cloud or call +64 21 441 032