

PQSIM 200

A POWER QUALITY EVENT GENERATOR

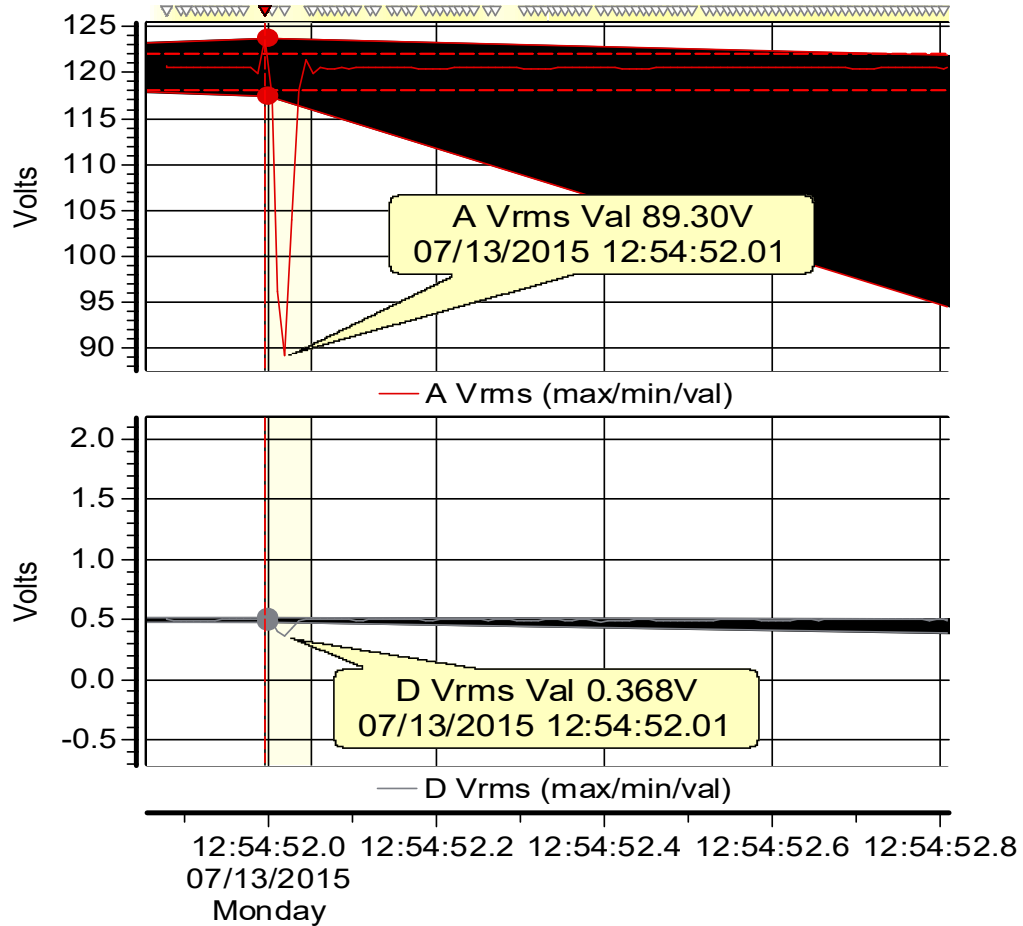
POWER QUALITY INC USA/POWER QUALITY THAILAND LTD

AUTO SEQUENCE OF PQ EVENTS

- When the Auto Sequence button is selected the PQsim will generate a series of 10 PQ events.
- The events are scheduled to be 1 event per minute to allow some time in the data. It is recommended the instrument under test interval be set to 1 minute.

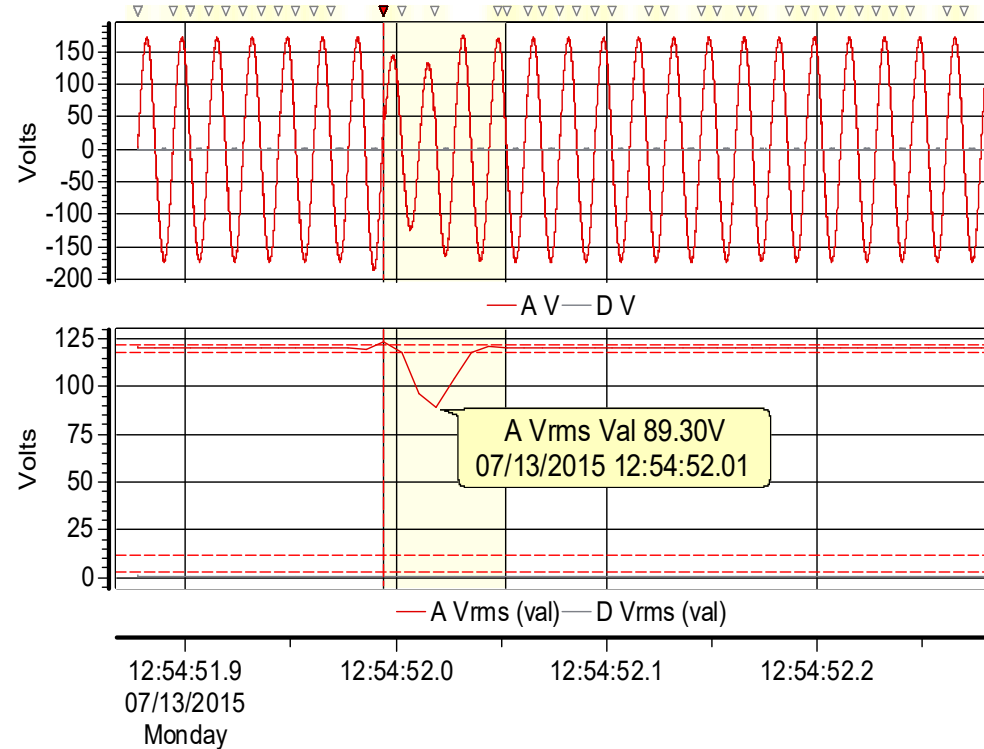
AUTO SEQUENCE EVENT #1 V SAG 50%

Event 1 Voltage sag to 90v



Event #12 at 07/13/2015 12:54:51.994
AVrms Instantaneous Sag

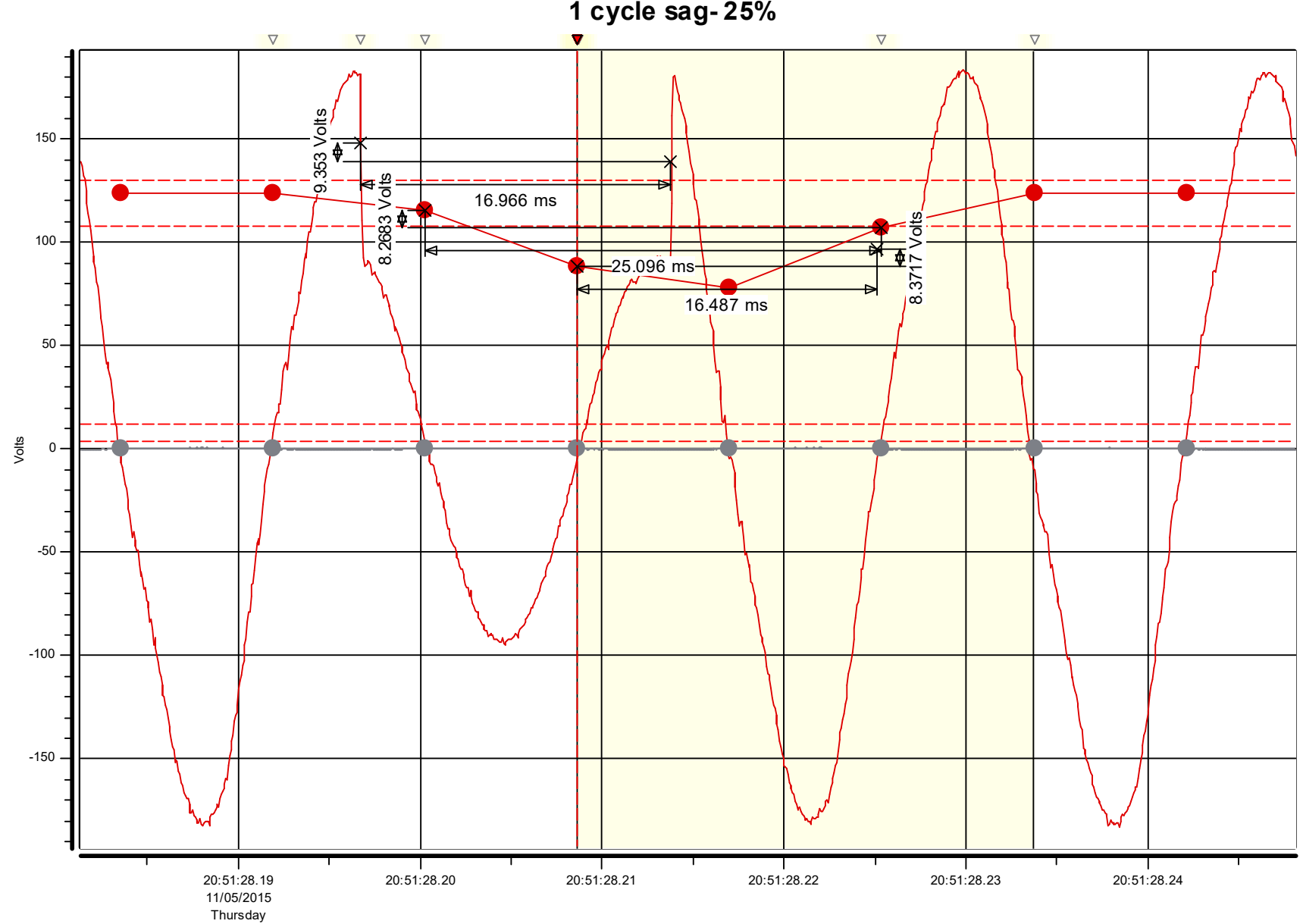
Event # 1 Details/Waveforms



Event #12 at 07/13/2015 12:54:51.994
AVrms Instantaneous Sag
CATEGORY: Short Duration Instantaneous Sag
Threshold crossed 118.0 V
Magnitude 89.3 V
MaxRMS 123.6 V
Duration 0.0584 Sec.

SAG 25% 1 CYCLE

- 25 MILLESECONDS
- PER IEC



— A V — D V — A Vrms (val) — D Vrms (val)

Event #63 at 11/05/2015 20:51:28.208

AVrms Instantaneous Sag

CATEGORY: Short Duration Instantaneous Sag

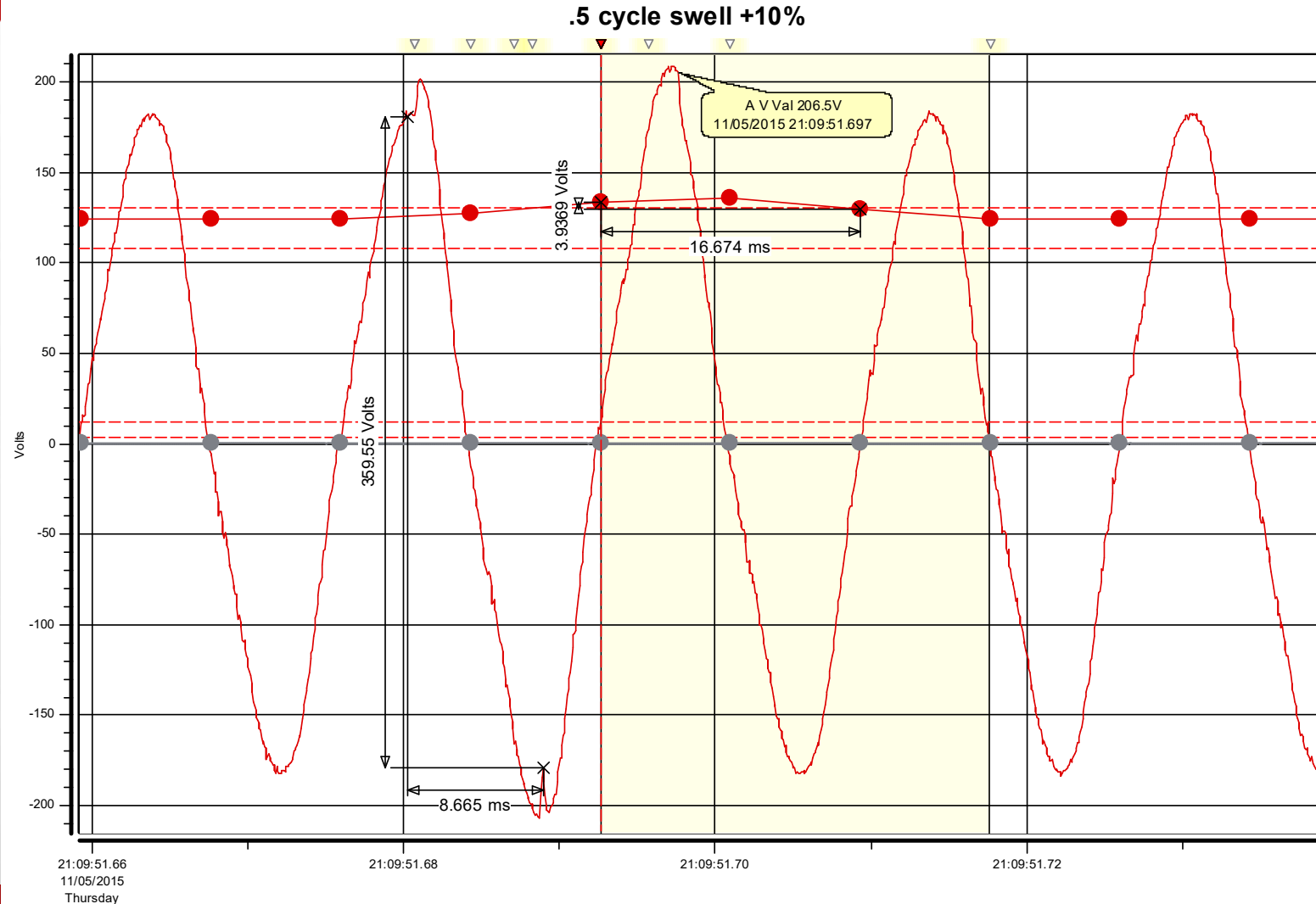
Threshold crossed 108.0 V

Magnitude 78.21 V

MaxRMS 107.1 V

Duration 0.02513 Sec.

0.5 CYCLE SWELL DUE TO NEUTRAL



— A V — D V — A Vrms (val) — D Vrms (val)

Event #200 at 11/05/2015 21:09:51.692

AVrms Instantaneous Swell

CATEGORY: Short Duration Instantaneous Swell

Threshold crossed 130.0 V

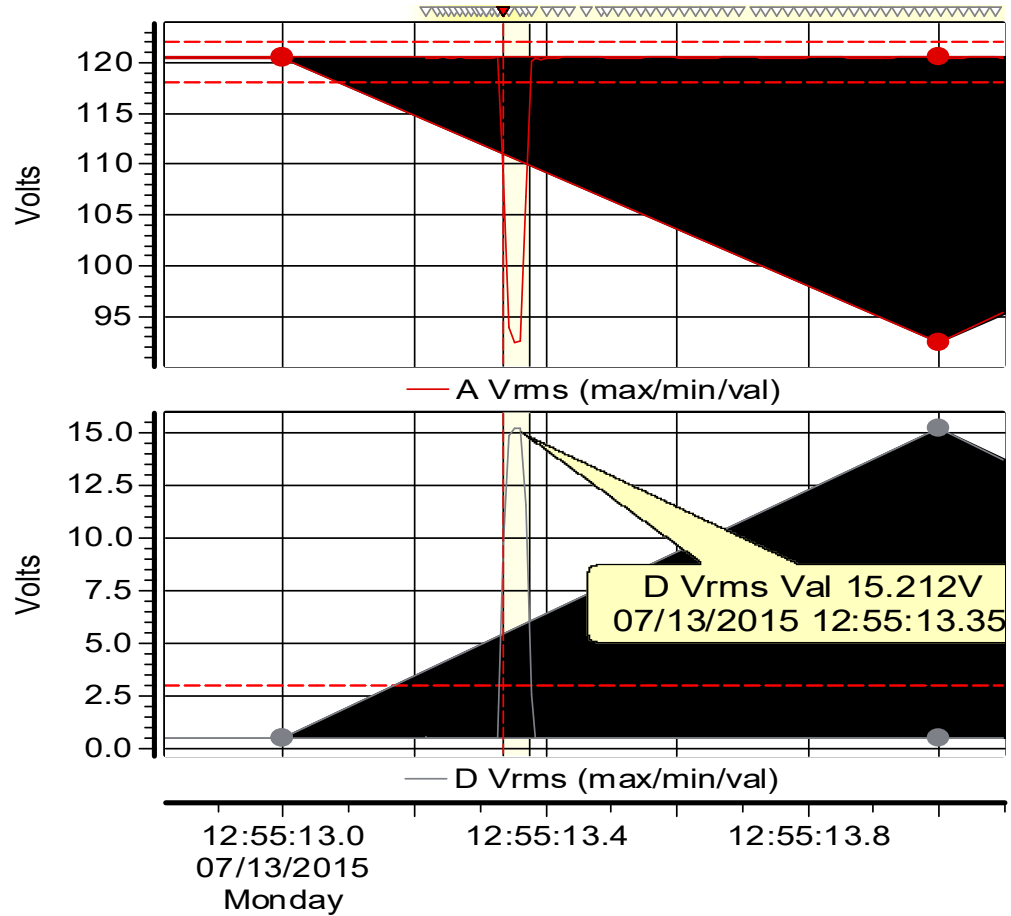
Magnitude 136.1 V

MinRMS 129.8 V

Duration 0.025 Sec.

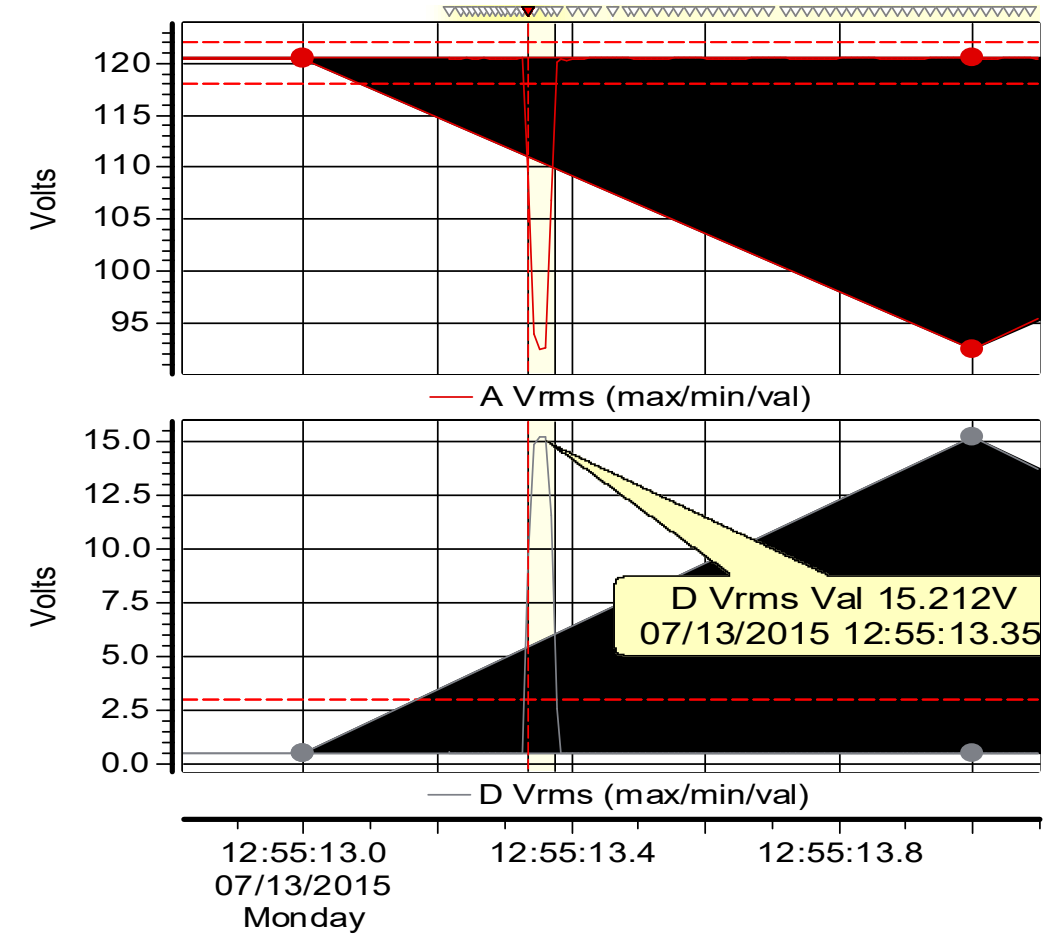
EVENT # 2 VOLTAGE SWELL NEUTRAL TO GROUND

Event 3 Swell neutral to ground



Event #136 at 07/13/2015 12:55:13.335
DVrms Instantaneous Swell

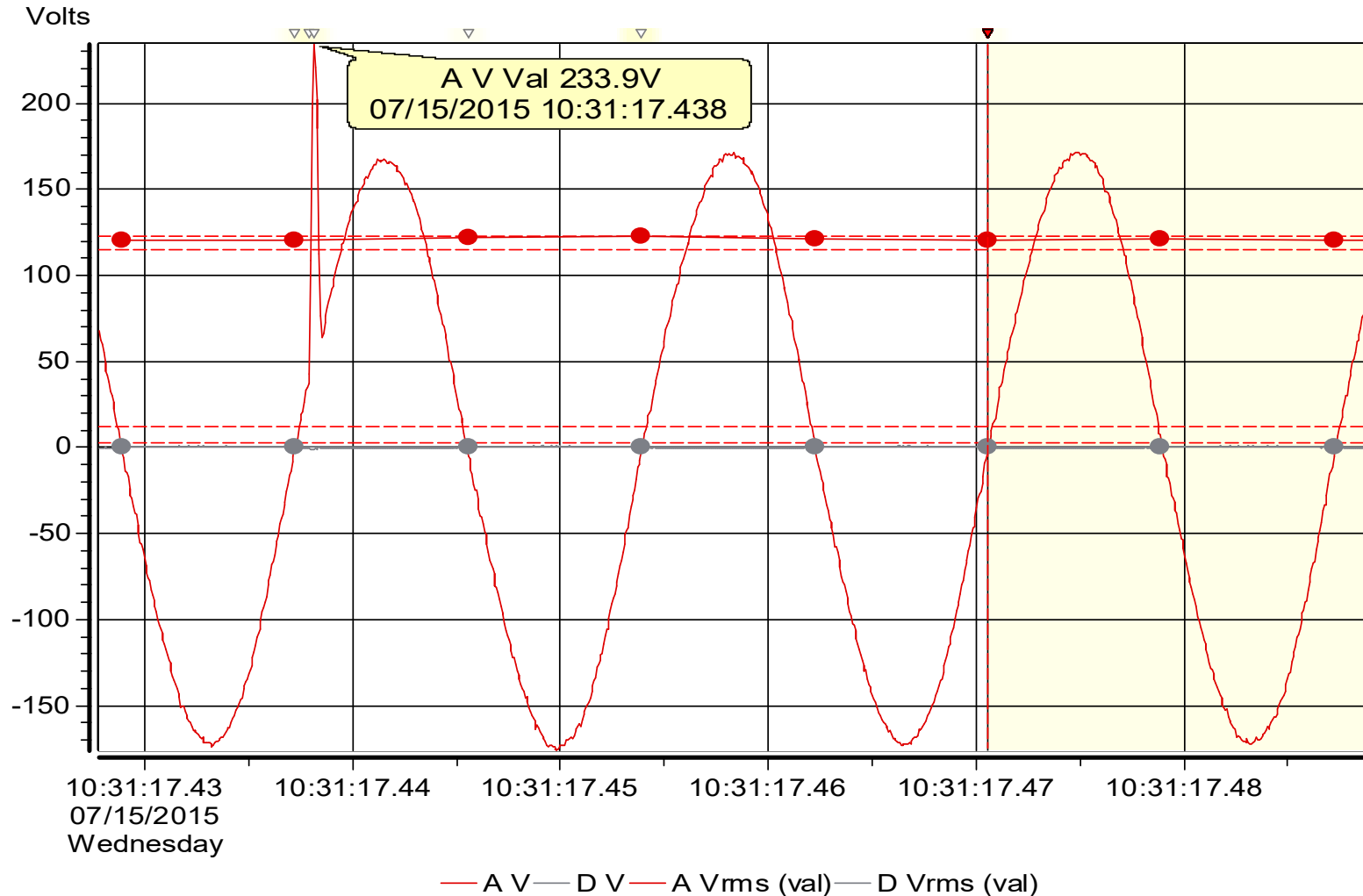
Event 3 Swell neutral to ground



Event #136 at 07/13/2015 12:55:13.335
DVrms Instantaneous Swell

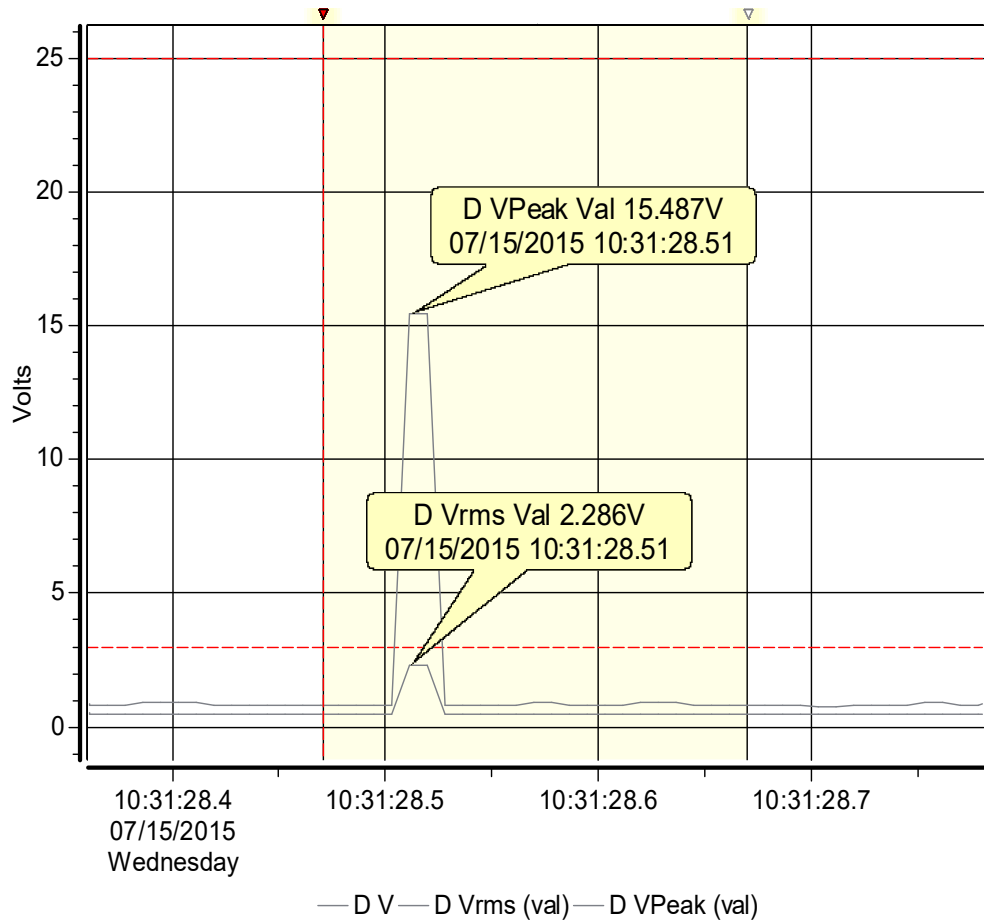
EVENT # 3 UNIPOLAR TRANSIENT

Event 4 transient Phase to neutral 233.9vpt



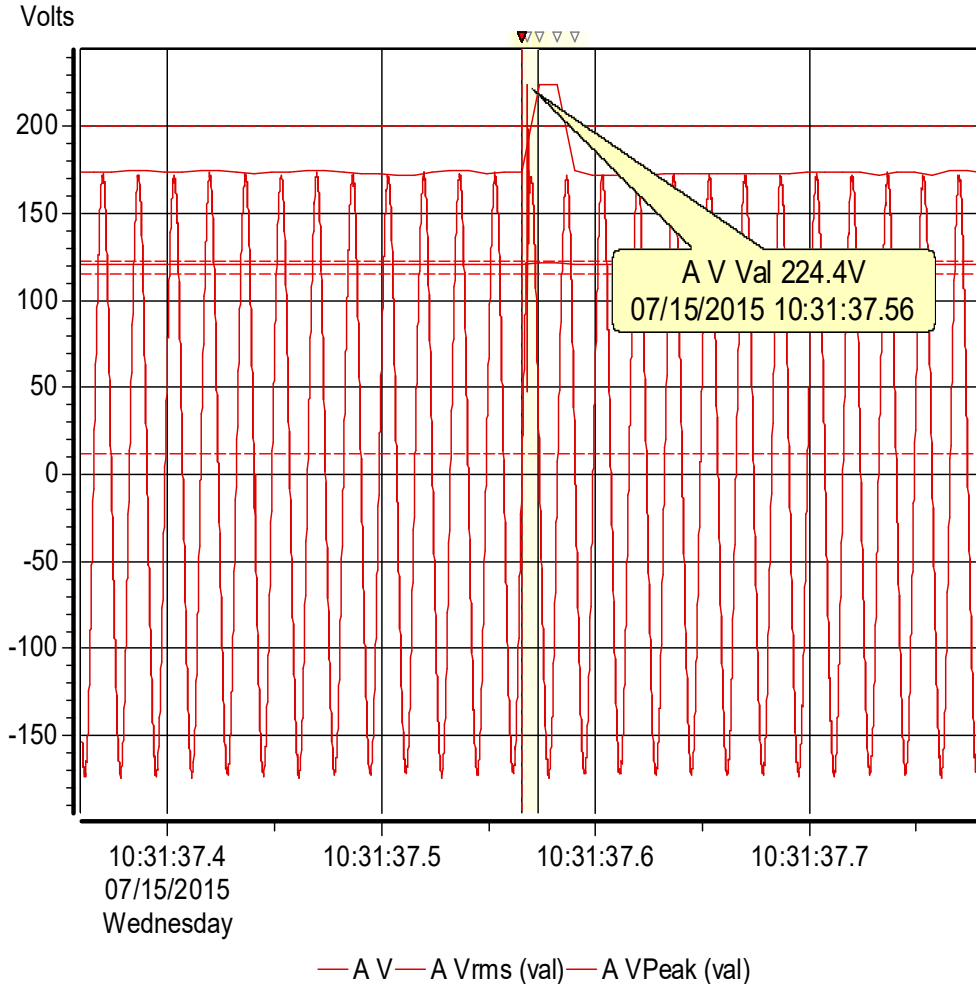
EVENT # 5 NEUTRAL TO GROUND TRANSIENT

Event 5 Bipolar transient neutral to Ground
2.24 vrms 15.48 Vpeak

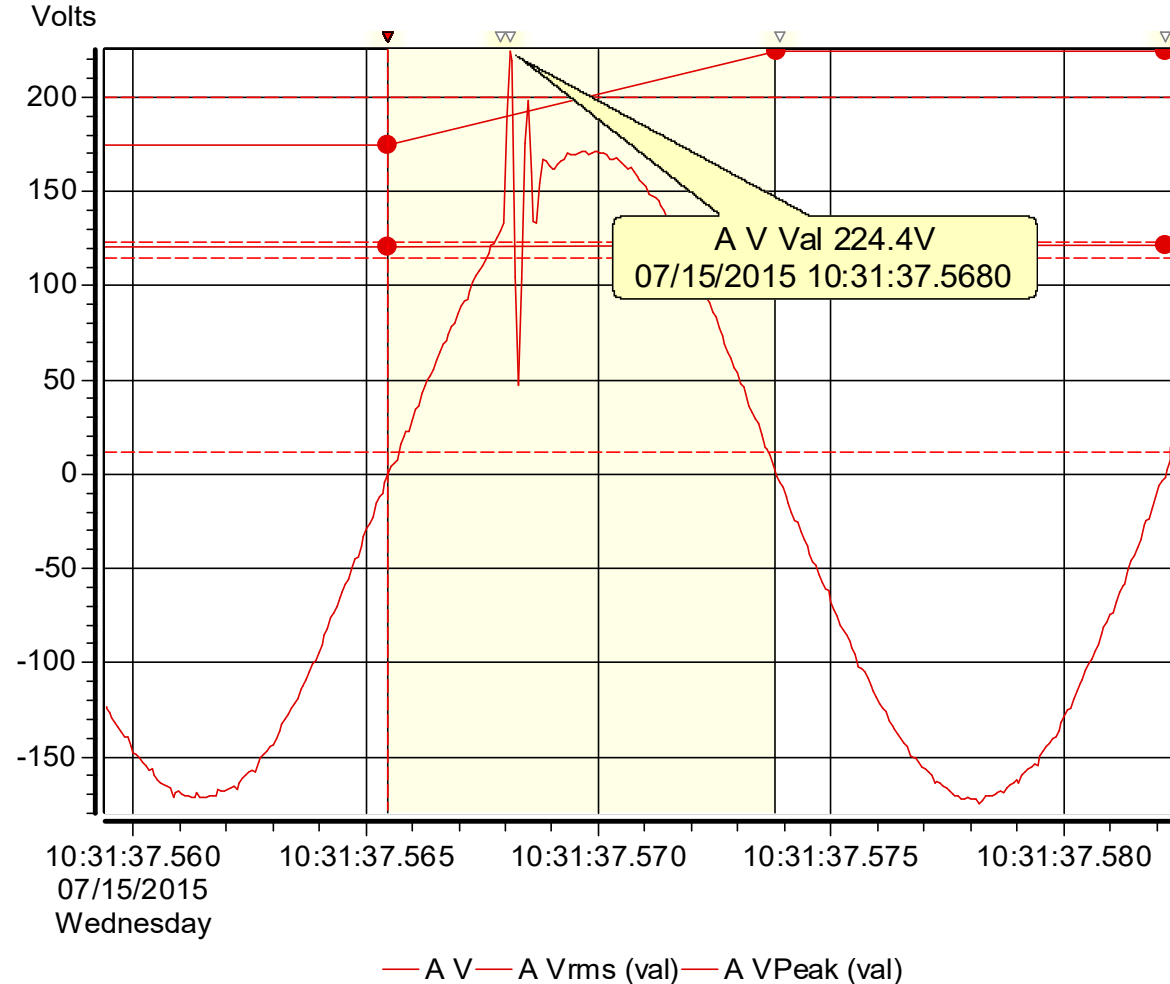


EVENT # 6 BIPOLAR TRANSIENT PHASE TO NEUTRAL

Event 6 Bipolar transient Phase to neutral
224 Vpeak

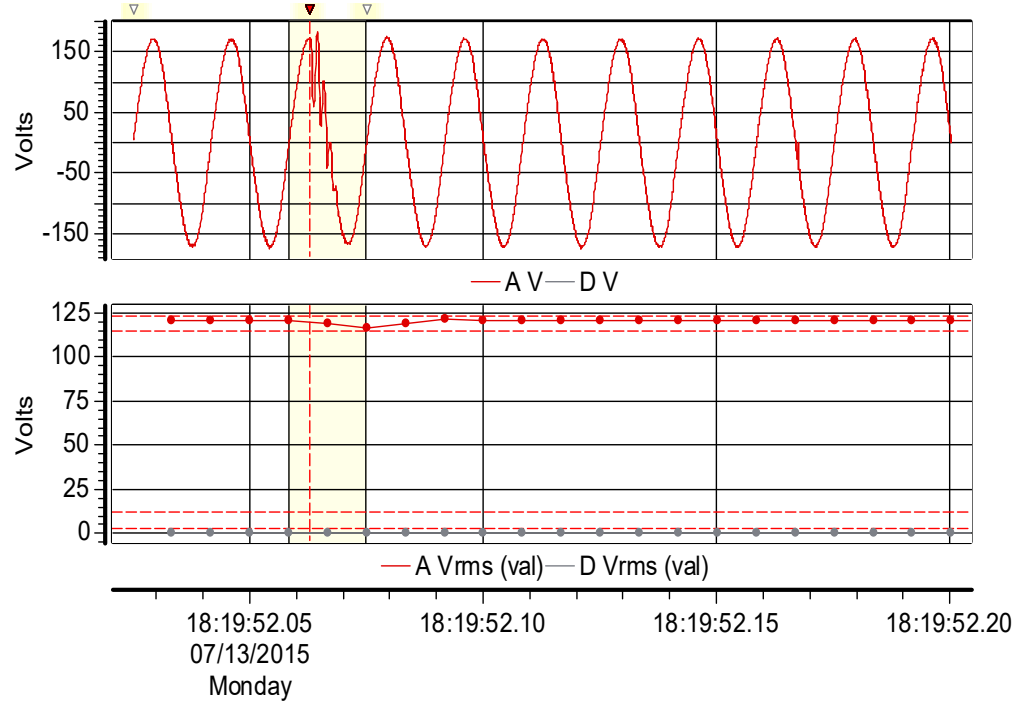


Event 6 Bipolar transient Phase to neutral
224 Vpeak



EVENT # 7 CAP SWITCHING TRANSIENT

Capacitor switching event



Event #28 at 07/13/2015 18:19:52.058

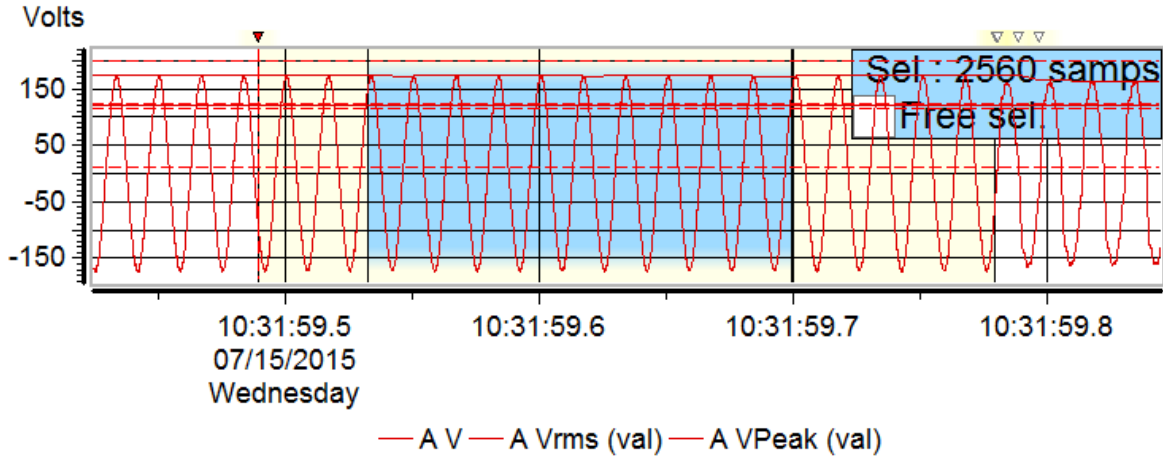
AV Mild Cap Switch Neg 1/2 Cyc

Phase 205.3 Deg

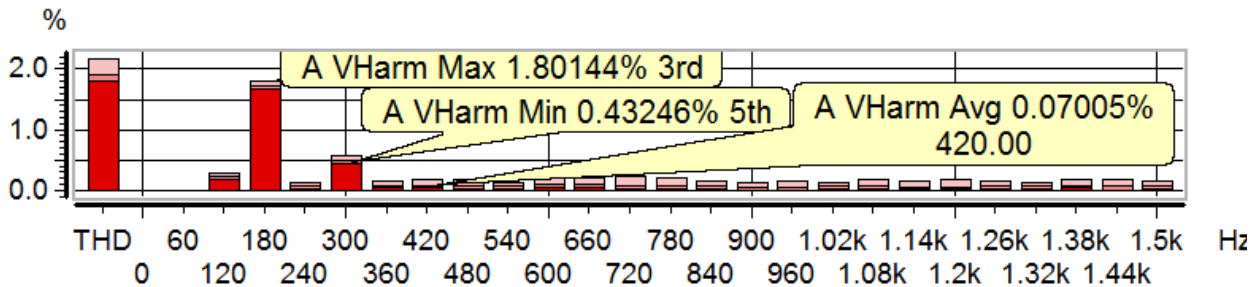
	A	B	C	D	A-B	B-C	C-A
Vrms	118.6	0.08989	0.08056	0.4805	118.6	0.1364	118.5
VPeak	182.7	0.2072	0.2060	0.8300			
Irms	1.392	0.000328	0.000409	0.002612			
IPeak	2.153	0.000838	0.001117	0.009783			

EVENT # 8. ODD HARMONICS

Event # 8 Odd harmonic increase

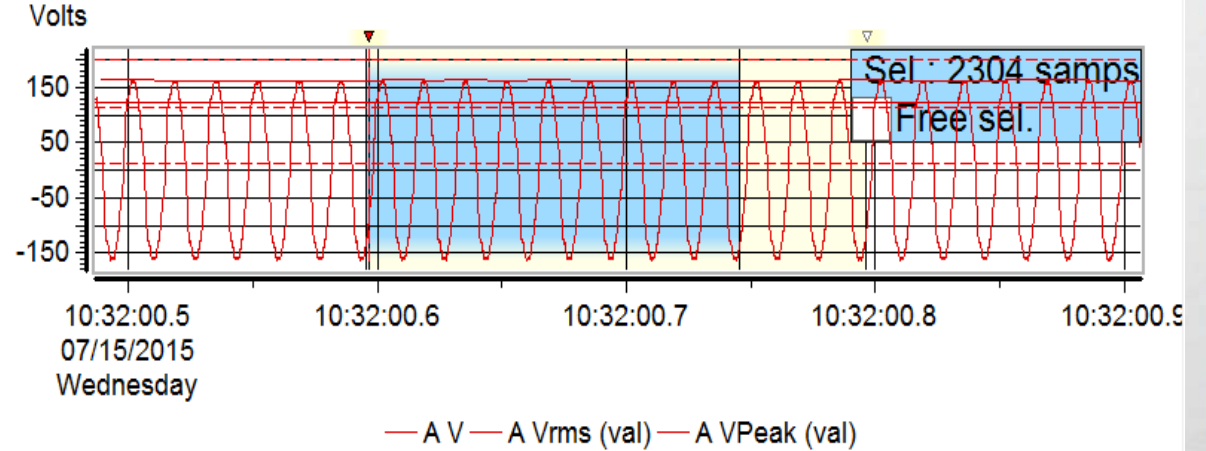


Waveform harmonics before event

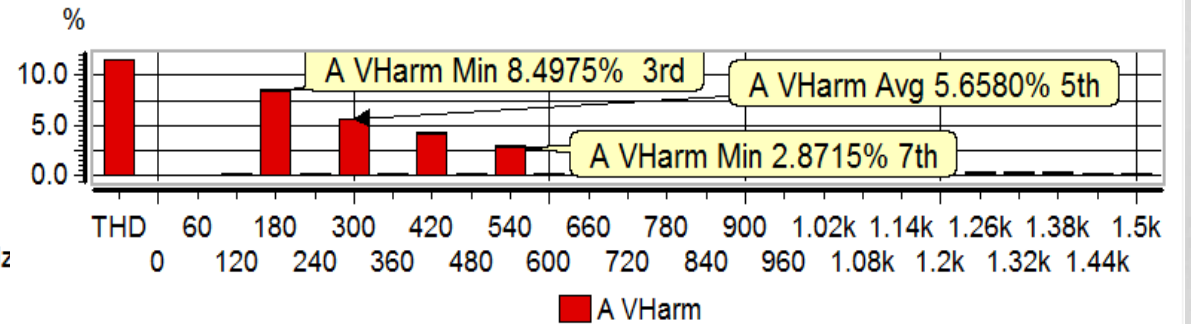


	AV	DV	AI
RMS	109.68	N/A	0.02
FND	100.00	N/A	0.00
DC	0.02	N/A	0.00
THD	1.90	N/A	0.01

Event # 8 Odd harmonic increase



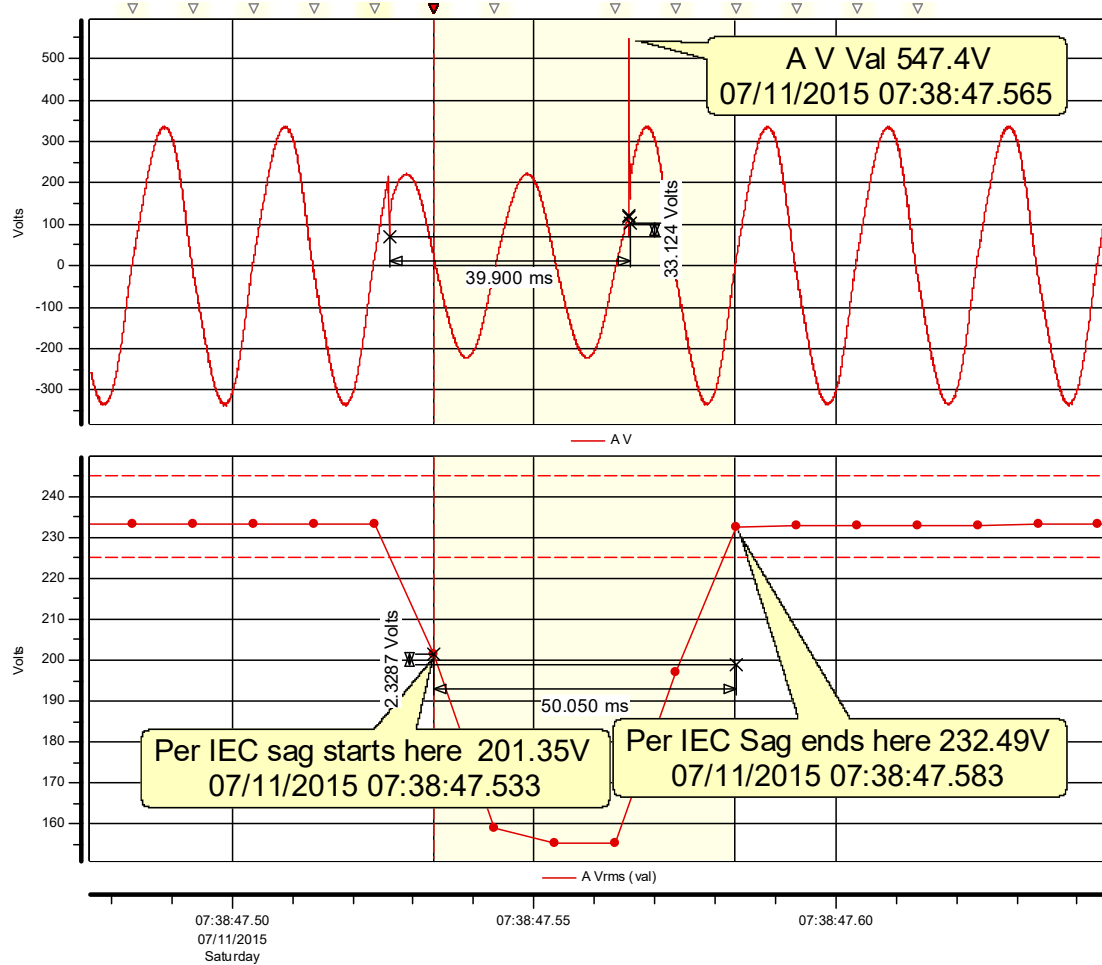
Voltage Waveform harmonics during the even



	AV	DV	AI
RMS	121.55	N/A	0.02
FND	100.00	N/A	0.01
DC	-0.00	N/A	0.00
THD	11.56	N/A	0.01

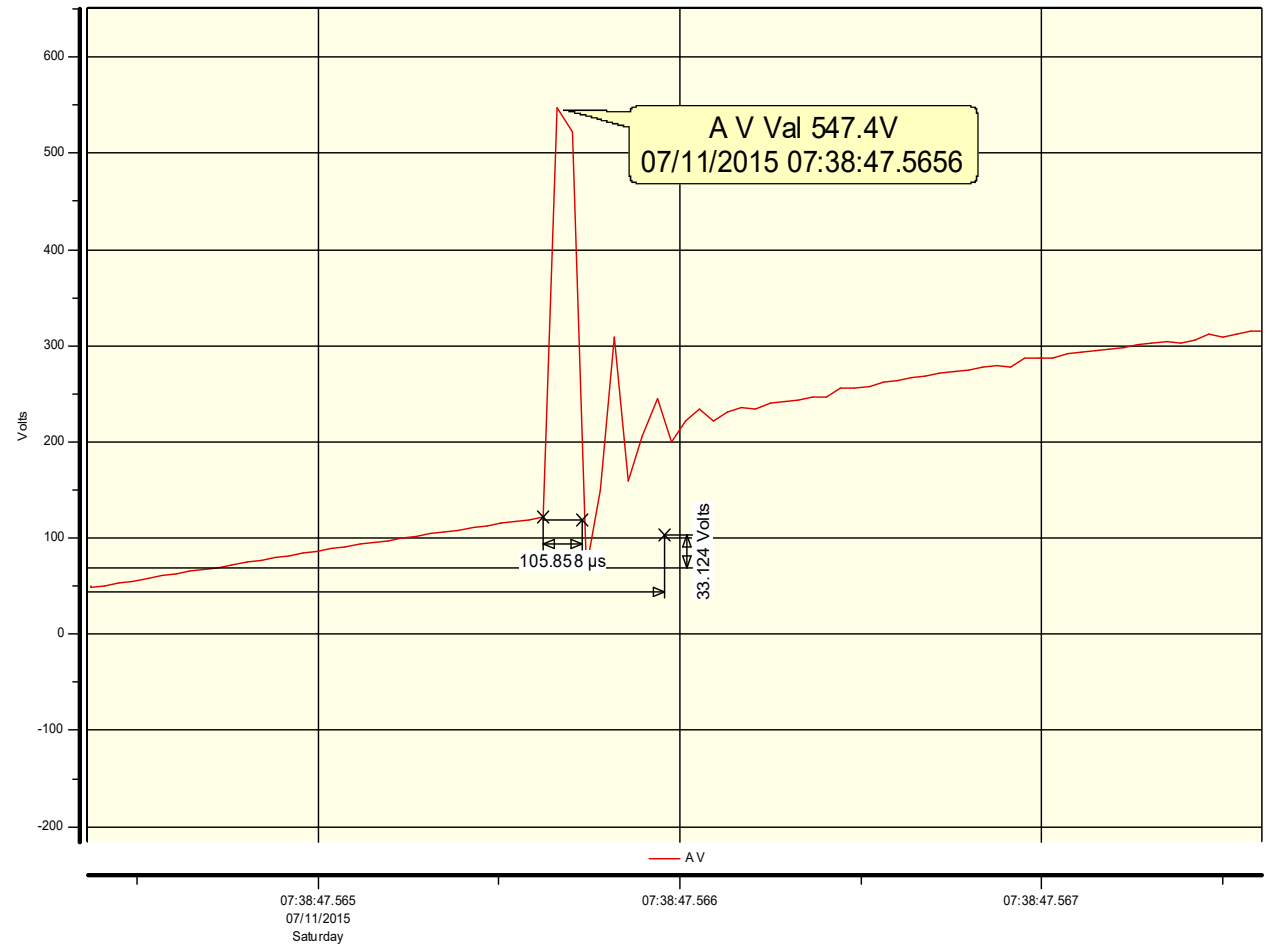
2 CYCLE VOLTAGE SAG WITH TRANSIENT

High Speed transient at the end of the sag



Event #162 at 07/11/2015 07:38:47.533
AVrms Instantaneous Sag
CATEGORY: Short Duration Instantaneous Sag
Threshold crossed 225.0 V
Magnitude 155.4 V
MaxRMS 201.3 V
Duration 0.05002 Sec.

High Speed transient at the end of the sag



Event #162 at 07/11/2015 07:38:47.533
AVrms Instantaneous Sag
CATEGORY: Short Duration Instantaneous Sag
Threshold crossed 225.0 V
Magnitude 155.4 V
MaxRMS 201.3 V
Duration 0.05002 Sec.