

HARMONIC ANALYSIS REPORT

Post Filter Installation

For

Leading Gear Manufacturing

Ranjangaon MIDC, Ahmednagar, Maharashtra 412220

By

SAS Powertech Pvt. Ltd.

101, Gera's Regent Manor, Survey No. 33, Area No. 39/570,
Behind Opulent Car Care Center Baner, Pune 411045

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Audit Date: 12 Oct 2018

INDEX

1) Equipment used and Audit Team	3
2) Summary of results	4
3) Main Incomer results	5

Equipments used and audit team:

No	Name of the equipment	SR. No Model	Make	Use
1	Power Analyzer	001645 (CA 8335)	Chauvin Arnoux	Electrical Parameter Measurement
2	Power Analyzer	214885 (CA 8335)	Chauvin Arnoux	Electrical Parameter Measurement

Audit Team:**SAS Powertech Pvt. Ltd.**

- 1) Mr. Narendra Duvedi (B.E. Electrical, BEE Certified Energy Auditor)
- 2) Mr. Vijay Sonawane

Leading Gear Manufacturing .

Mr. Sunil Patange

Certification:**Report Certified by:**

Narendra R. Duvedi.

B.E. Electrical and Certified Energy Auditor Reg No: EA 10859

Chartered engineer

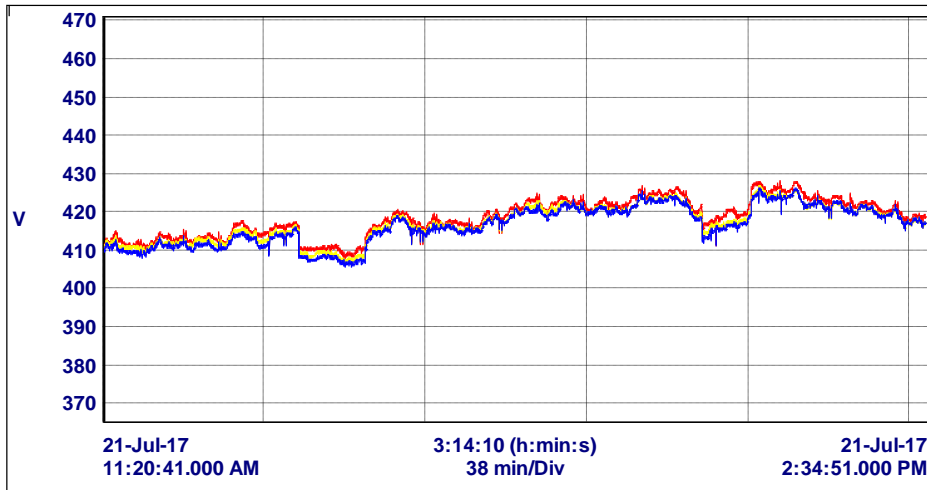
Summary of New Panels installed and Results achieved.

Installed Panels			
TR 1	100A Active Harmonic Filter.		
TR2	100A Active Harmonic Filter. 600KVAR@525V RTPFC x 1		
Location	Parameter	Before	After
Transformer No-1	Current distortion	16%	3.8%
	Voltage distortion	2.2%	2.2%
Transformer No-2	Current distortion	14.3%	4 %
	Voltage distortion	2.1%	1.7%

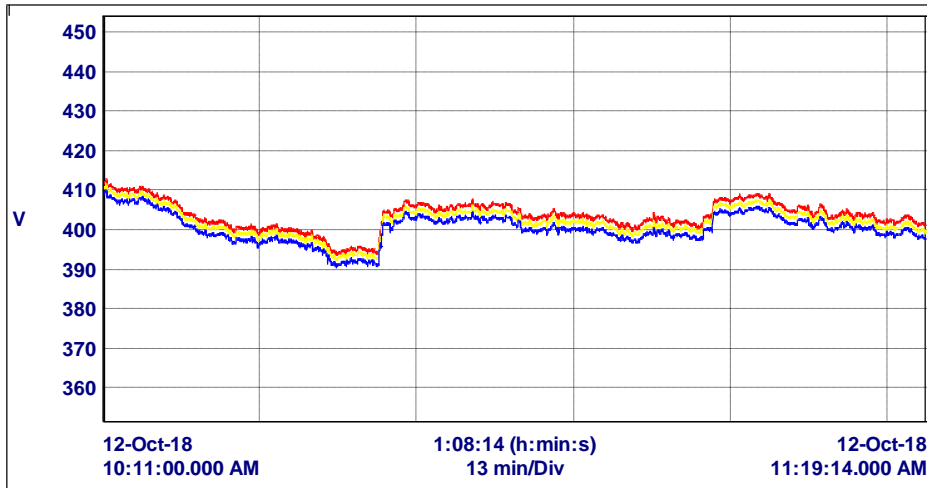


Transformer No-1 Main incomer

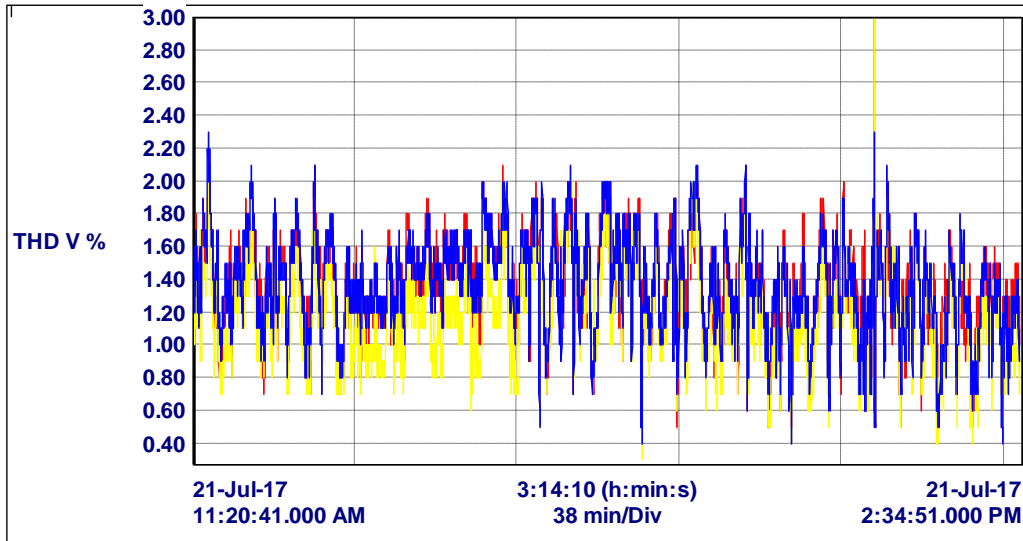
Voltage (Before)



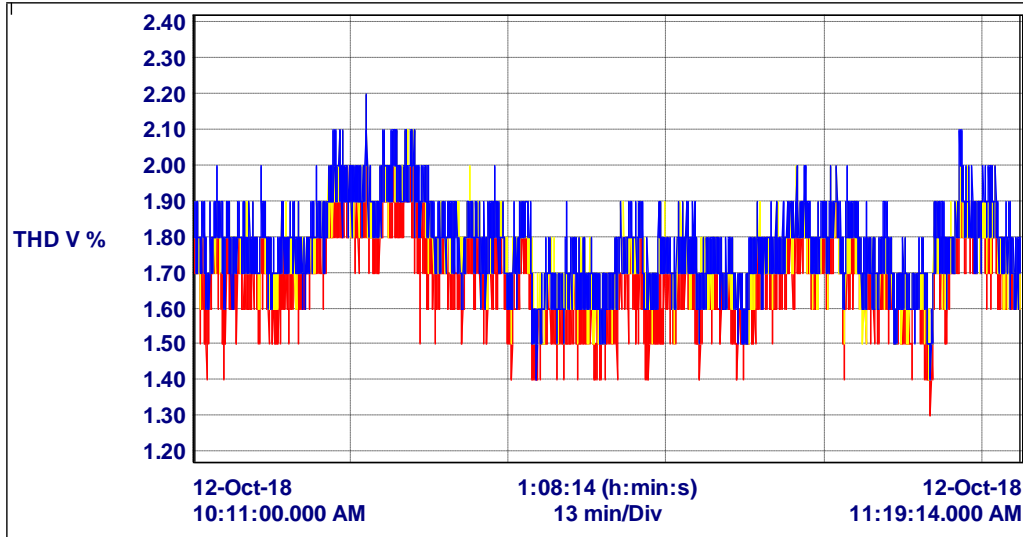
Voltage (after)



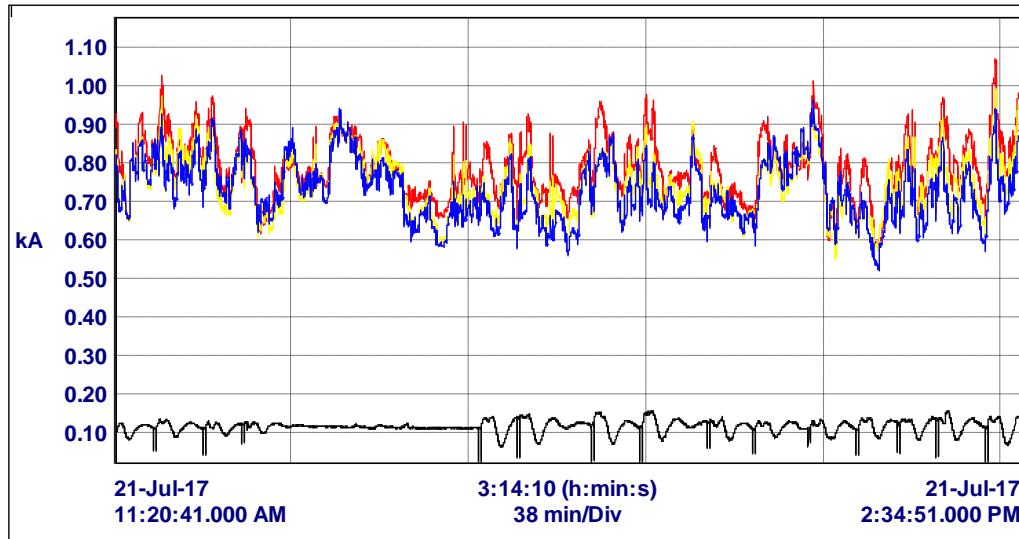
Voltage harmonic distortion. (Before)



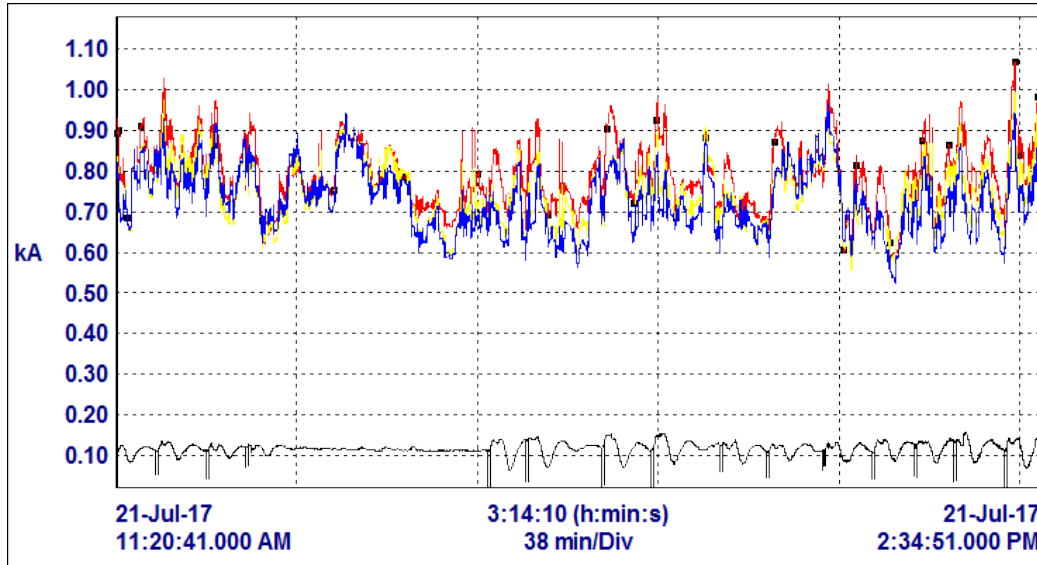
Voltage harmonic distortion. (After)



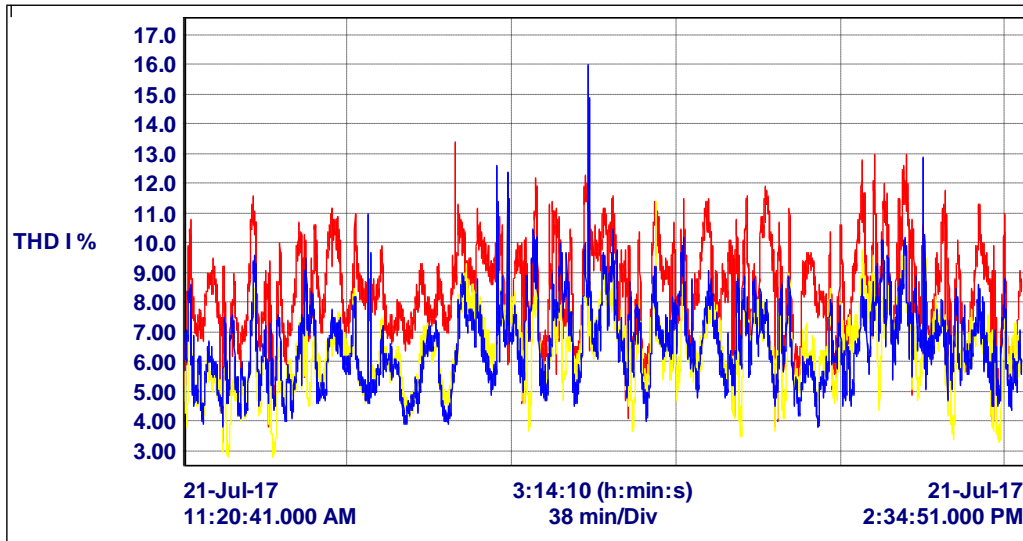
Current – As demanded by Load (Before)



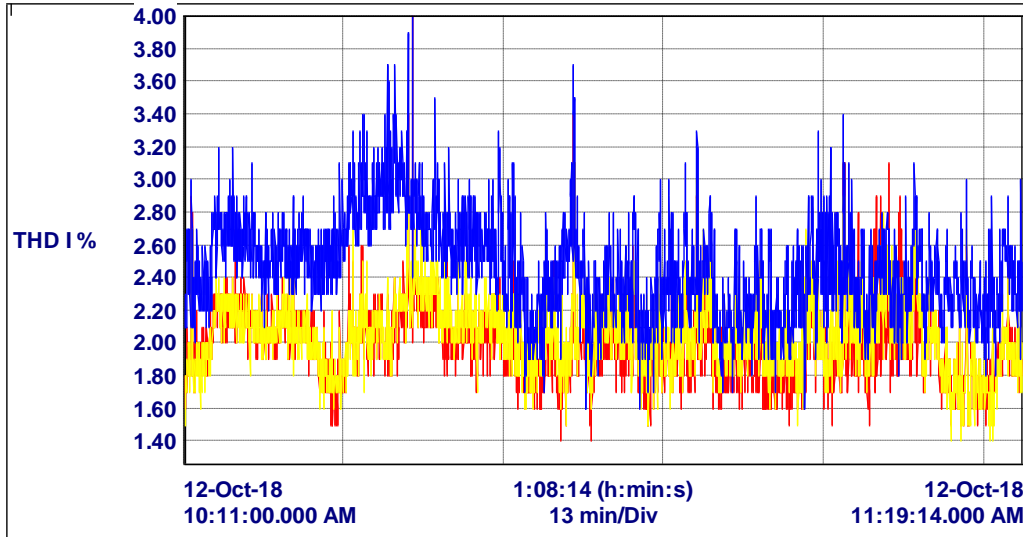
Current – As demanded by Load (After)



Current harmonic distortion (before)

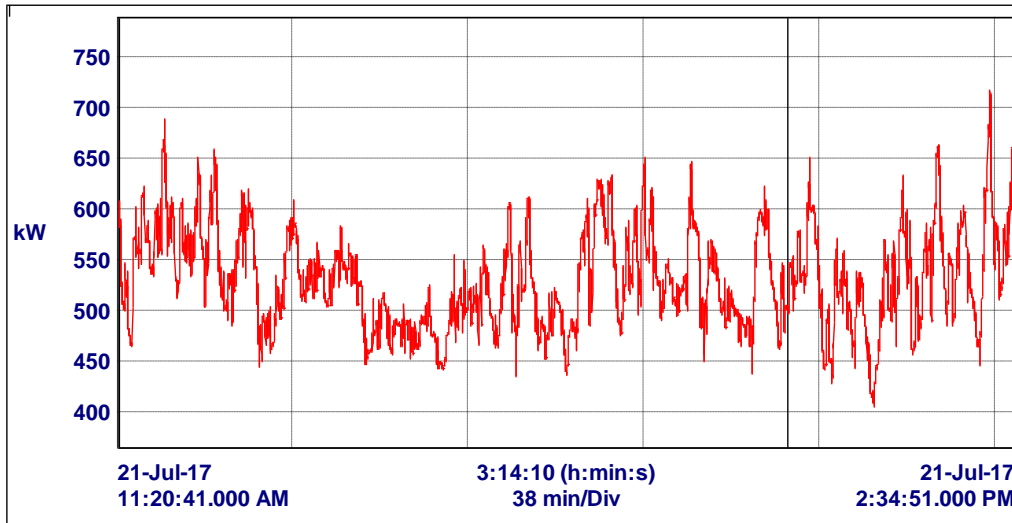


Current harmonic distortion (After)

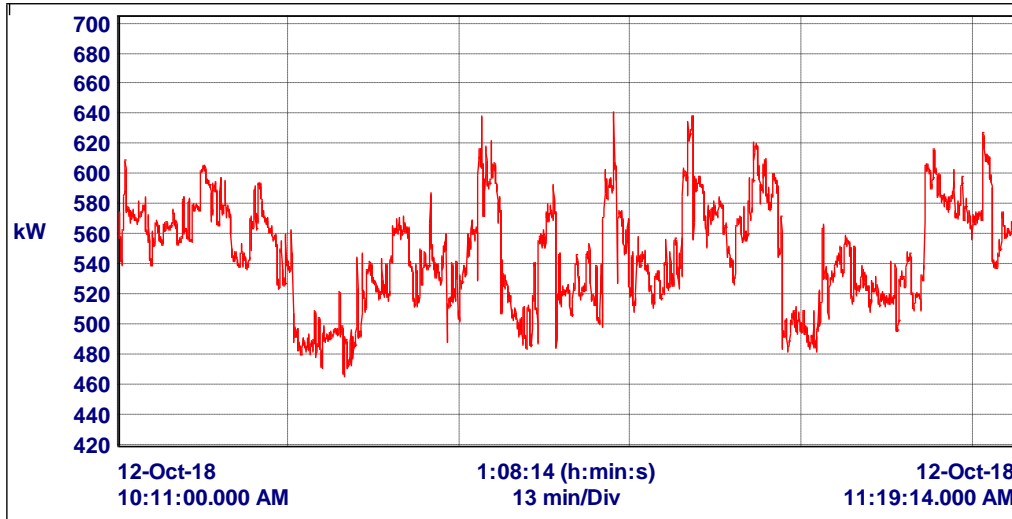


Current Harmonic Distortion Reduced from 16% to 3.8%

KW Load Before

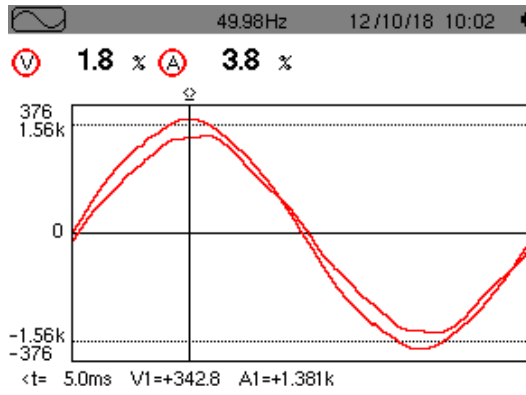
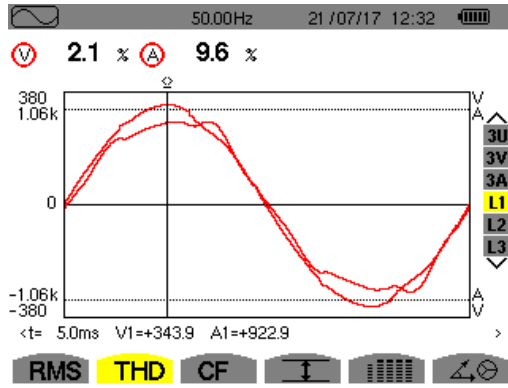


KW Load After



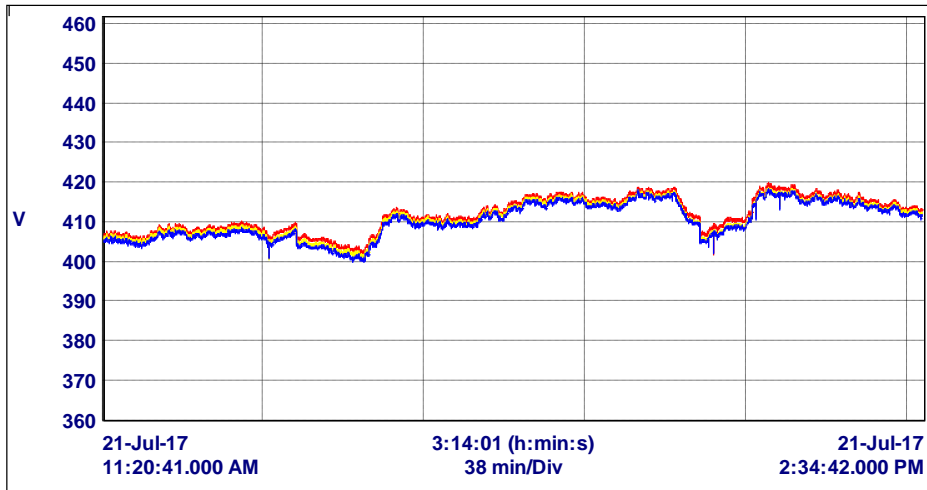
BEFORE

AFTER

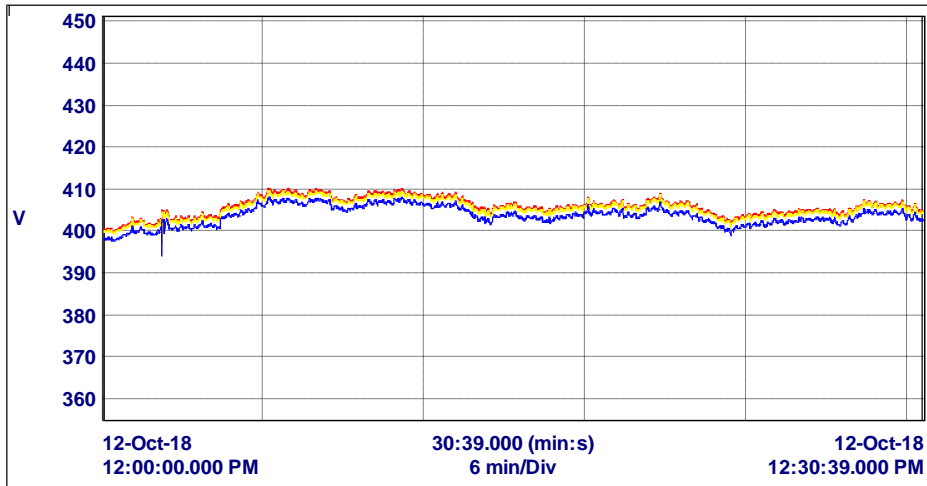


Transformer No-2 Main incomer

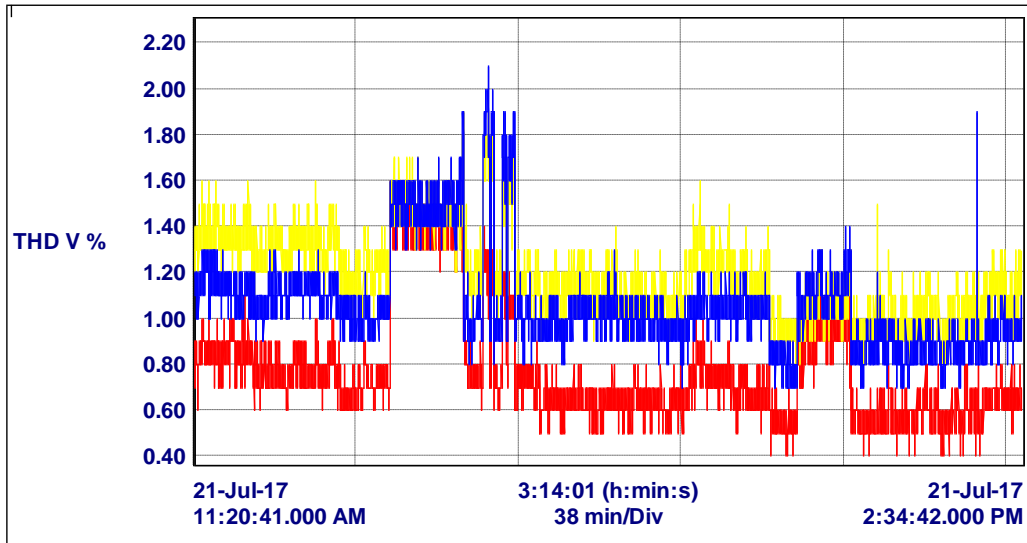
Voltage (Before)



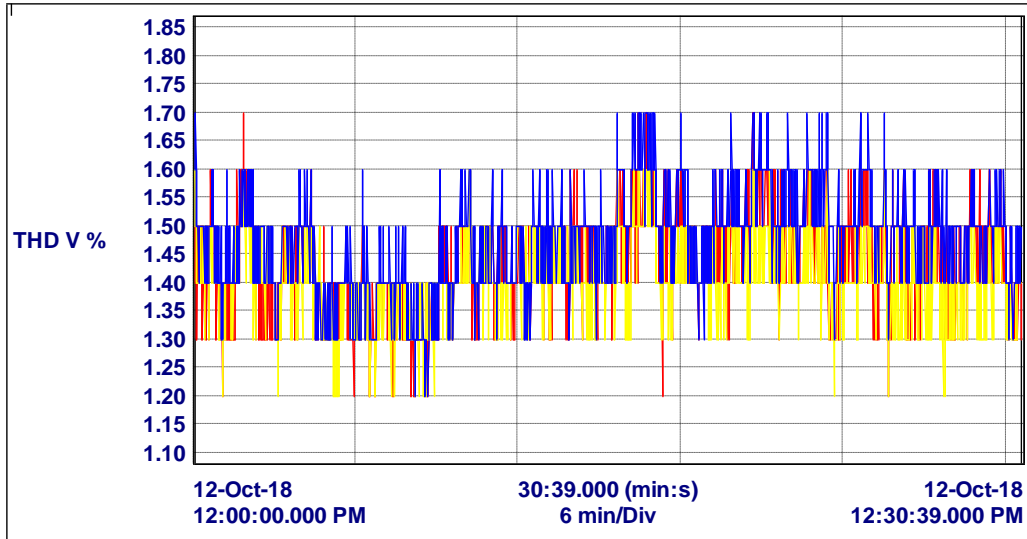
Voltage (after)



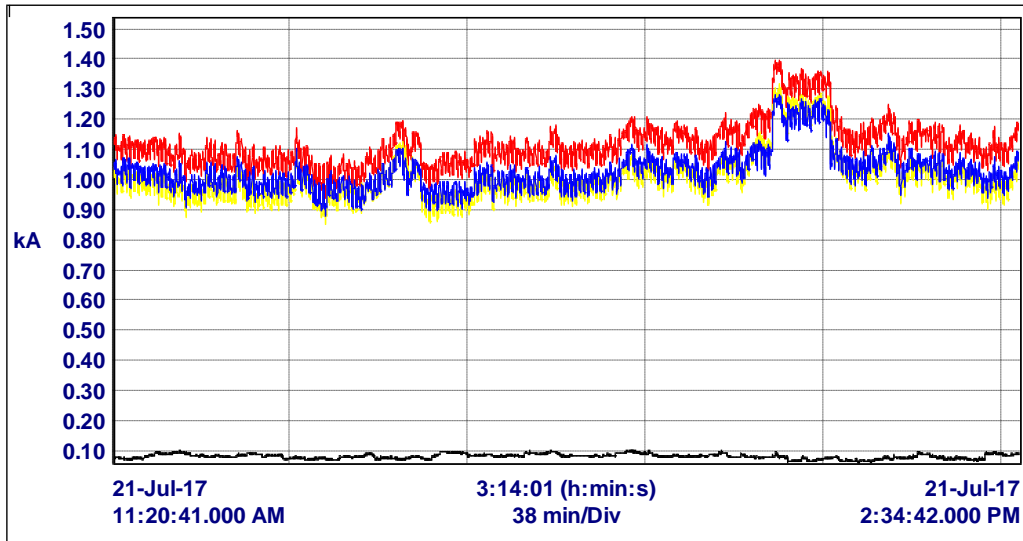
Voltage harmonic distortion. (Before)



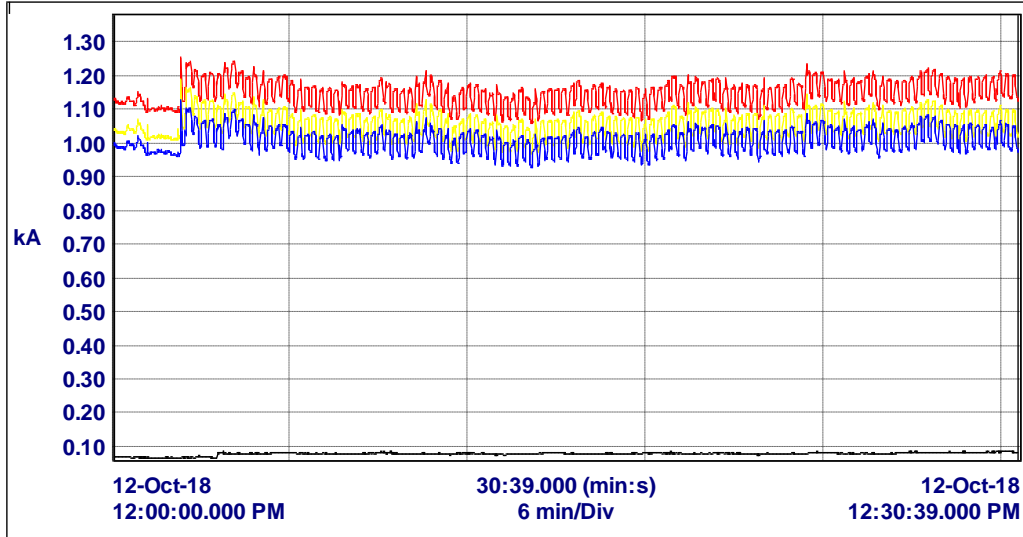
Voltage harmonic distortion. (After)



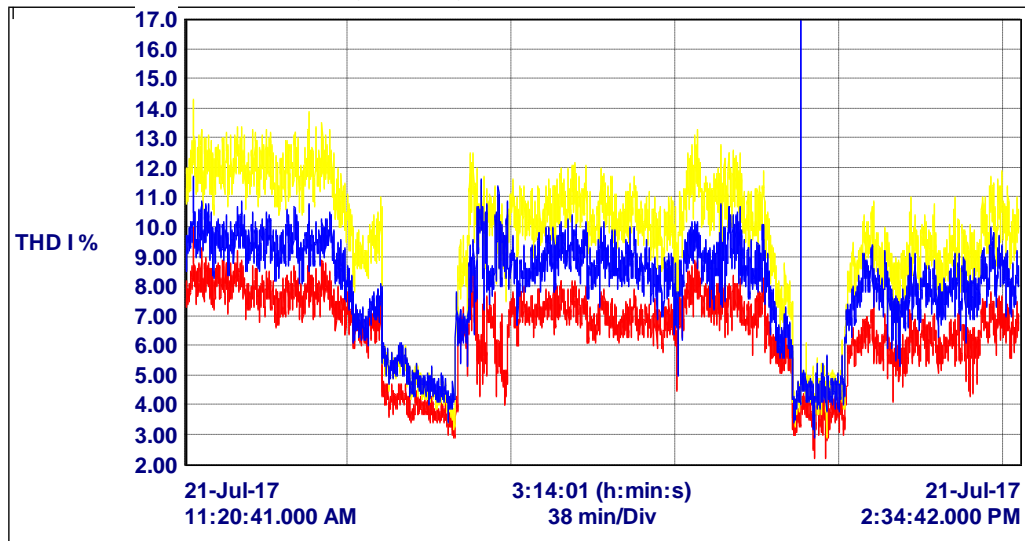
Current – As demanded by Load (Before)



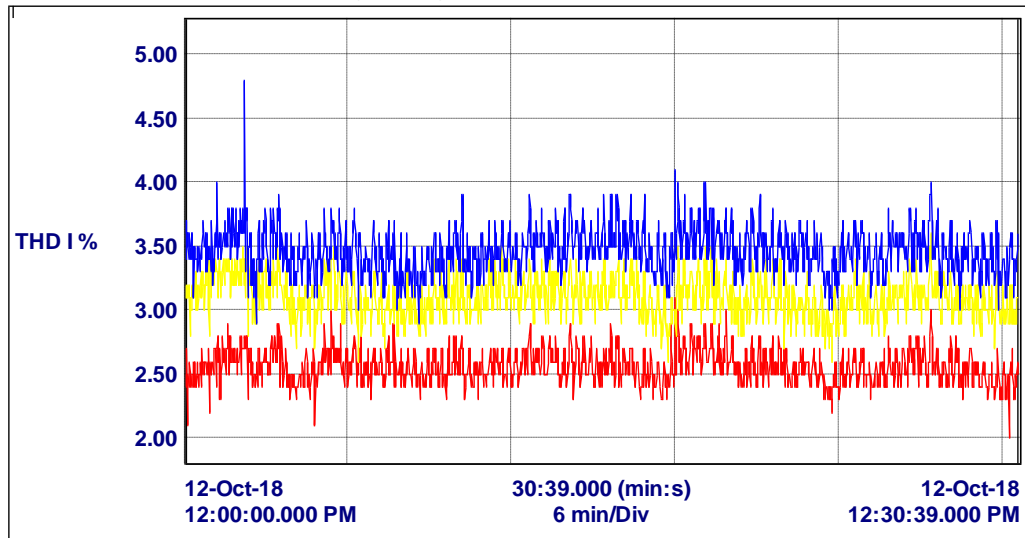
Current – As demanded by Load (After)



Current harmonic distortion (before)

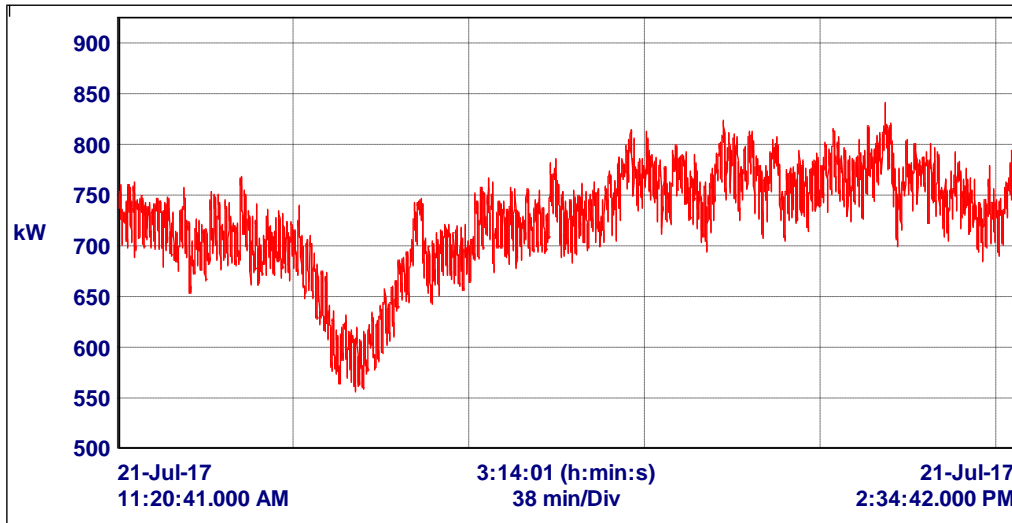


Current harmonic distortion (After)

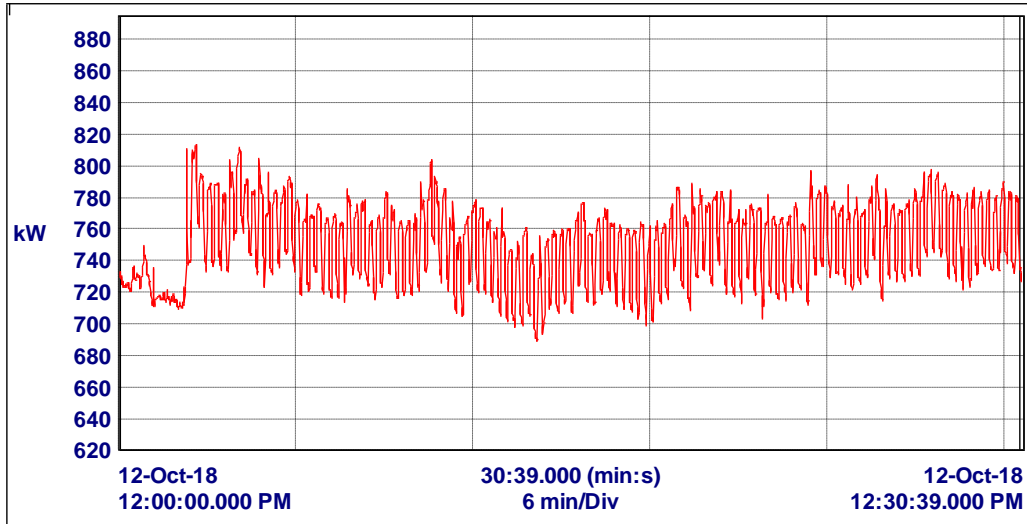


Current harmonic distortion – Reduction to 14% from 4%

KW Load Before



KW Load After



BEFORE

AFTER

