















### 5.7 FFT Analysis for uncompensated and compensated harmonics

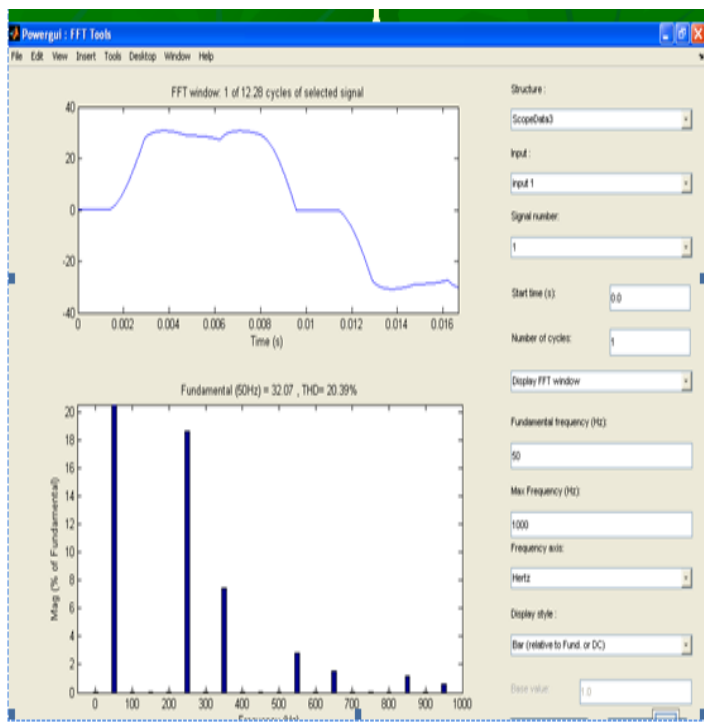


Figure 5.7 FFT waveforms analysis before compensation

hysteresis current control for active power filters based on time and magnitude errors control in order to improve the quality of output current and switching losses. The simulation result shows that for a same THD (total harmonic distortion) unipolar modulation has lower switching losses. Power quality improvement can be achieved in a distribution network using this control approach in active power filters.

Performance can be further improved by an improvement in the design of the extraction circuit.

Performance can be further improved by an improvement in the design of the PWM control circuit.

### VII REFERENCES

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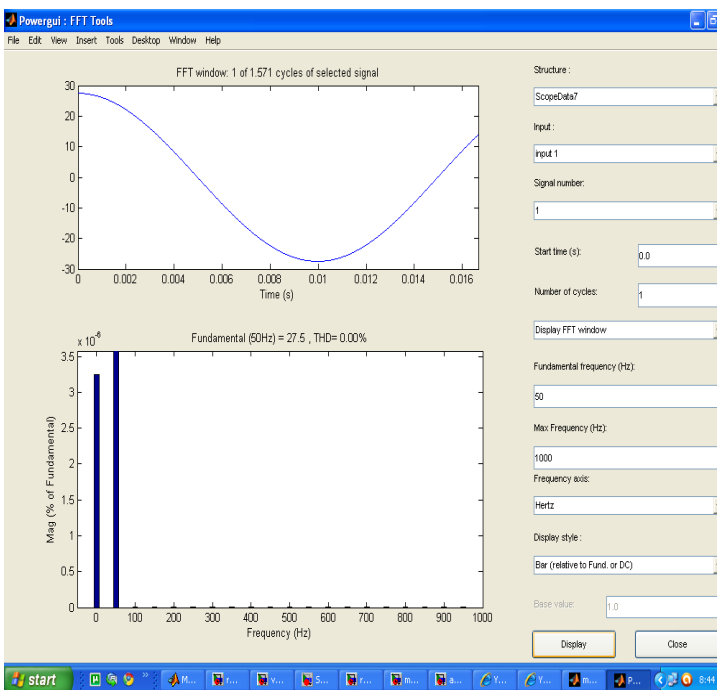


Figure 5.8 FFT waveforms analysis after compensation

### VI CONCLUSION & FUTURE WORK

A detailed Simulink model for compensation of system harmonics as being developed using a unipolar PWM used in