



Waste Water Treatment Facility: Biddeford Maine EP's Waveform Correction Technology Rescues Energy Saving Project

The waste water treatment facility in Biddeford Maine implemented a facility wide energy savings project that included installing sophisticated equipment such as VFD's. After installing the final VFD's for aeration the power quality of the facility became polluted. VFD's began to fail, controls lost programming and noise on the ground triggered release valves that dumped raw sewage into the streets.

Three-C Electrical Company was contracted to solve this emergency and immediately contacted Environmental Potentials to see if waveform correction technology could solve this issue.

A power quality study revealed the Biddeford facility was plagued by current and voltage high frequency noise. This level of noise is typical for a facility with several VFD's. After analyzing the readings, EP's Darrin LeRoy, recommended installing one EP-2000 at each of the four breakers in the main panel, one EP-2844 at each of the four out buildings and one EP-2750 ground filter at each of the problemating 150hp VFD's.

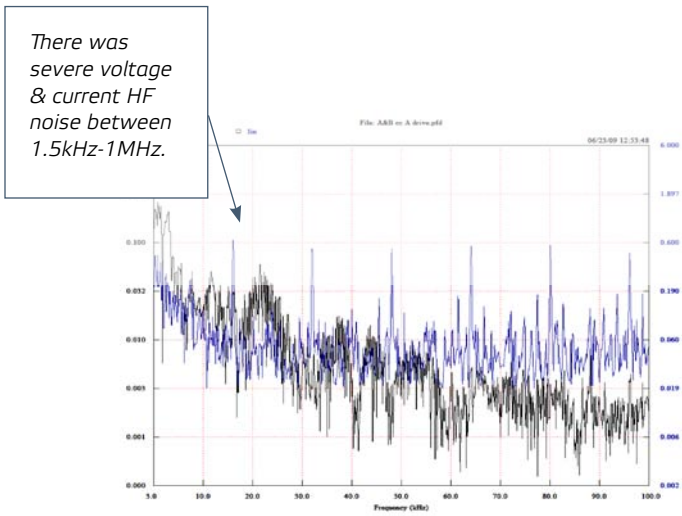


Figure 1: Current & Voltage Noise Before EP

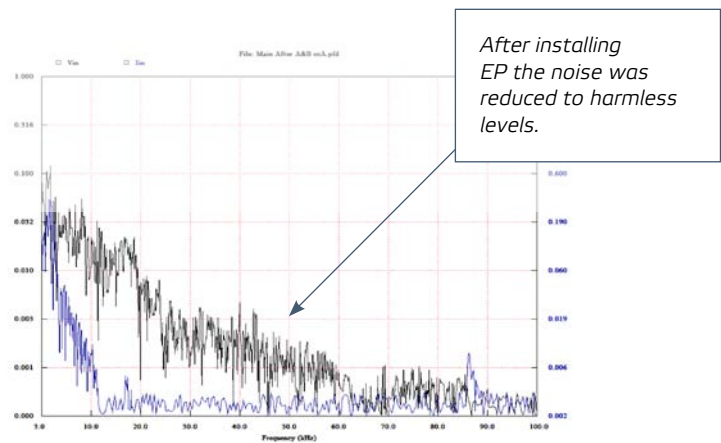


Figure 2: Current & Voltage Noise After EP

As more and more companies look to impliment energy saving projects, it is vital to protect these projects with Environmental Potentials' waveform correction technology. Energy saving equipment is nonlinear in nature and this degrades power quality. This degradation of power quality can threaten the ROI of the entire energy savings project.

Environmental Potentials' waveform correction technology eliminates harmful noise and ensures the waveform going to expensive equipment is as sinusoidal as possible.