

What is the quality of the electricity supplied?



Generators can cause major problems when not properly wired.

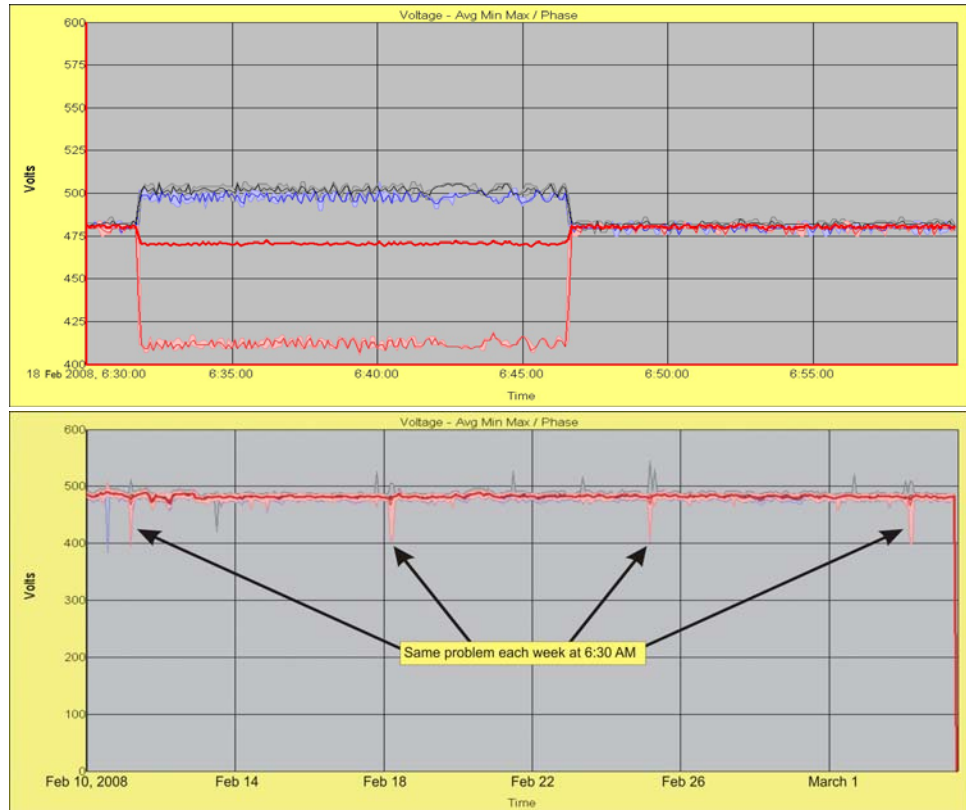
In many Lift Station like this one, problems occur every week, week after week, at exactly the same time: Here, a differential of 90 volts for 15 minutes between phase 1 (red) and phase 2 (black) or 3 (blue).

The life expectancy of the pumps and control components is greatly reduced. Worst, after replacing prematurely the damaged components, the same fate will append to the new ones. Intermittent anomalies are very

common problems (32%) and are highly difficult to detect by a competent operator.

In this true case, a weekly generator test might become the source of future emergencies.

“Power Utilities and Generators were not easily monitored before MAID Labs created their high tech data logger.”



Voltage adjusted to show phase to phase voltage. Real voltage taken between ground and each phase.

Highlights abnormal behaviors

It is very common to find abnormal behavior in complex electrical system. Over 32% of the industrial and municipal electrical systems monitored so far by MAID Labs' instruments had strange events occurring often and every day.

This means that 1/3 of the lift stations might reveal

something like this example.

In this case, are these very common PLC programming errors or faulty components?

No PLC or RTU can detect bouncing contacts on a defective starter. MAID Labs technology can.

Date and Time	Types	Motors
28 January 2005, 19:03:20	Motor 2 Stop	Pump 2
28 January 2005, 19:08:04	Motor 1 Start	Pump 1
28 January 2005, 19:08:04	Motor 2 Start	Pump 2
28 January 2005, 19:08:04	Motor 2 Stop	Pump 2
28 January 2005, 19:09:24	Motor 1 Stop	Pump 1
28 January 2005, 19:13:55	Motor 2 Start	Pump 2
28 January 2005, 19:15:14	Motor 2 Stop	Pump 2
28 January 2005, 19:19:39	Motor 1 Start	Pump 1
28 January 2005, 19:19:40	Motor 2 Start	Pump 2
28 January 2005, 19:19:40	Motor 2 Stop	Pump 2
28 January 2005, 19:21:06	Motor 1 Stop	Pump 1
28 January 2005, 19:23:31	Motor 2 Start	Pump 2
28 January 2005, 19:25:21	Motor 2 Stop	Pump 2
28 January 2005, 19:27:48	Motor 1 Start	Pump 1
28 January 2005, 19:27:48	Motor 2 Start	Pump 2
28 January 2005, 19:27:48	Motor 2 Stop	Pump 2
28 January 2005, 19:29:23	Motor 1 Stop	Pump 1
28 January 2005, 19:32:50	Motor 2 Start	Pump 2
28 January 2005, 19:34:11	Motor 2 Stop	Pump 2
28 January 2005, 19:38:17	Motor 1 Start	Pump 1
28 January 2005, 19:38:17	Motor 2 Start	Pump 2
28 January 2005, 19:38:17	Motor 2 Stop	Pump 2
28 January 2005, 19:39:37	Motor 1 Stop	Pump 1

“The first step towards correcting a problem is to know about it.”