



European Power Quality Survey

NEWS MEDIA SECTOR

NO ELECTRIC POWER,
NO MEDIA POWER

Many news media companies' electrical installations are still unreliable.

News media depend on being able to get news out to as many people and as quickly as possible. Printed or broadcast, reliable electricity supply is crucial for this quick dissemination. In both cases, the speed of this turn-around cannot cope with any form of electrical disturbance. But do all media companies take sufficient measures to avoid seriously negative impacts that are caused by electric power supply disturbances?

According to the European Power Quality (PQ) Survey, many News Media companies still have inadequately designed electrical installations. Printing as well as TV programming can be increasingly customized at the last instant thanks to digitization. However, this state of the art technology requires a state of the art electricity supply, otherwise power disruptions risk wiping out valuable programming data or playing havoc with meticulous printing planning.

A wide range of potentially disastrous events

Various forms of electrical power disturbances exist, each offering up a wide range of potentially significant negative impacts. The Power Quality Survey identified the following:

- **A power interruption can halt a newspaper printing line.** Given the volumes and speed of such a line, every sudden and unexpected stoppage creates a paper and ink pile-up in the presses and that can take hours to be re-set. The print run in question either has to be printed elsewhere at high cost, or simply will not be distributed at all...
- **Voltage dips or interruptions can disrupt digitalized video programmes or electronically managed TV advertising segments.** Advertising programming data or monitoring information can be lost, potentially reducing if not losing altogether that period's revenue stream.
- As the whole media industry relies on electric power, **every power interruption risks all staff being left idle**, from editorial to print production staff and administration. This costs the company dear and places intolerable pressure on already hard pressed editorial and print production teams.
- **Electric power interruptions can damage** expensive television broadcasting equipment, such as transmitters or cameras.
- **Harmonics are a hidden threat** – unless they are regularly monitored. They can seriously damage expensive electric infrastructure such as electric generators and transformers.
- **Working conditions can be adversely affected by "flicker"**, a power quality phenomenon resulting in flickering lights. Flicker does make people feel out of sorts and irritable, which is likely to reduce their productivity.

Many news media companies do not adequately assess the various power quality risks for their business. Key system parameters are not measured, or not frequently enough, and the losses due to electric power disruptions tend not to be assessed as a totality, related as they are to different cost centres.



The cost of the solution – an adequate electric power installation at each site – is often less than the annual losses it avoids.

POWER INTERRUPTIONS PLAY HAVOC WITH NEWSPAPER PRINTING

A newspaper publishing company's site was regularly experiencing electric power interruptions, which were often affecting the printing process. In one case a complete run had to be reprinted, adding 30% to the newspaper production cost. In another one, a whole edition was lost, leading to significant losses in sales and advertising revenues. In this extreme but illustrative case, the total annual loss due to power interruptions mounted to approximately 10% of the company's turnover, or more than 40% of its net annual profit. Moreover, lost editions tend also to lose readership.

TV BROADCASTING COMPANY PAYS HIGH EXTRA COST

A European TV broadcasting company protected itself from longer power interruptions by installing back-up generators. However, those generators require some time to start up. During the short interruptions that still persisted, several types of losses were recorded. Voltage dips caused computers and electronic equipment to lose data. As a consequence, administrative staff wasted two hours per event on average to re-input the lost data, while the broadcasting production staff wasted an hour's work on average each time this occurred. Independently of this, short power interruptions also damaged broadcasting transmitters.

Understanding the problems – designing the solutions

ECI's Power Quality Survey demonstrates that the majority of the power disturbances faced by the news media sector could be avoided by a more adequate design of the company's own electrical installations. The solutions therefore lie very much in the business' own hands.

Electrical design engineers recommend a holistic approach to review all the issues at hand, based on three operational pillars:

- **Correct measurement**, to assess the full impact of power disturbances events and why they are happening
- **Appropriate design** for the electric installations, beyond the prevailing standards
- **Considered investment** justified by assessing system renovation cost set against the accumulated losses.

PROFITABLE INVESTMENT OPPORTUNITIES

The news media sector suffers unnecessary financial losses caused by their own electrical power systems that often cannot cope with a variable electric power supply.

ECI's Survey has identified many losses and much wastage due to poor power quality throughout the sectors' different locations. It has demonstrated that power quality solutions often cost less than the financial losses they resolve. When purchasing new equipment for digitalizing print or broadcasting, this is a sound opportunity to consider an investment in a robust power quality solution. This will ensure that the new generation of equipment actually allows you to improve the service to your target audience.

Do you know what power disturbances are costing you?

You can contact us at <http://contact.leonardo-energy.org> to find out how the issues raised here may be affecting your company.