

What Is PQView®?

PQView is an industry-leading multi-component software system for monitoring and analyzing Power Quality and energy measurements.

Who currently uses PQView?

- PQView is designed for power providers, industrial consumers, power generators, consulting companies and researchers.
- It is currently used by major utilities worldwide, including BC Hydro, Fortis Alberta, Hydro One Networks, Hydro Ottawa and Hydro Quebec. A complete list of customers can be found at <http://www.pqview.com/users/>.

How has PQView benefited current users?

- PQView imports info from different devices allowing the creation of many customizable reports to meet the customer's needs, reducing the cost of field investigations and improving customer satisfaction.
- With a number of modules available, including fault location, PQView has become a valuable Asset Management tool. The fault location or "Reactance to Fault" (RTF) module allows you to use waveform data collected from existing PQ meters, import breaker operations from SCADA systems, and import system model data to report estimated fault locations to operations staff within 2-5 minutes of a fault. This reduces the time required to pinpoint the problem as

well as required breaker maintenance, fault current wear and tear, and damage – which in turn extends the life of cables.

- Follow-up fault analysis also helps determine if faults are reoccurring in a specific area for reasons such as poor tree trimming, excessive salt contamination, bad insulators and lightning arrestors.
- One Canadian utility imports wind speed and direction data from Environment Canada sources and correlates this with fault data during certain wind conditions to locate areas that might need better pole configuration or more storm guys.
- Close analysis of the captured waveforms and trend data can also eliminate the cost of major repairs or replacement of large expensive substation components. Hydro Ottawa has successfully used PQView data to determine eminent failure of five defective on-load tap-changers and were able to take them out of service before catastrophic failure and major outages occurred.
- PQView has also identified a voltage imbalance anomaly that is associated with tap change operations in a new substation transformer.

How will my company benefit from implementing PQView?

- Asset Management engineers and staff can use PQView data and reports to predict equipment damage before catastrophic failure to save high repair costs, prevent long-duration outages and possibly prevent environmental oil spills and fires.
- It can also trouble shoot performance problems and protection and control failures, investigate equipment failures, and help develop Predictive Maintenance programs.
- System Control staff can use PQView data during an outage to determine direction of fault, identify faulted phases and fault locations to facilitate repairs to damaged equipment, reduce outage time and prevent future outages.
- Customer Service staff and Key Account managers can use stored PQ data to help customers troubleshoot PQ problems. Often customers will call to report a problem in their facility because of “brownouts or surges”. If the customer has a timestamp when this event occurred, it can often be correlated with a captured event at the feeder station, leading to improved customer satisfaction and decreased operations cost for investigating unknown events. The data can also be provided to help the customer develop a mitigation plan to reduce their own down time and costs.

Will I have to buy special meters and hardware?

- In many cases, electrical utilities and industrial and commercial facilities may already have revenue meters and protection relays capable of providing Power Quality data. One of the most unique features of PQView is that it is capable of importing data from many sources. See the list at <http://www.pqview.com/data-sources/>.

How does PQView integrate with Historians and Distribution Model software?

- PQView has the ability to import data from a number of sources. Many utilities use OSIsoft PI Historian to store long term event and trend data typically imported from a SCADA or DMS system. Many also use distribution system modeling software such as Cooper CYMEDist or SynerGEE. PQView has a data handler to import data from these databases. A data handler can also be created for DESS models.

- Correlation of all this data allows PQView to determine fault locations in near real time. This allows operators and restoration personnel to locate and restore faults and damage quicker, find previously unknown fault locations and eliminate future outages. PQView can acquire breaker, recloser, and faulted circuit indicator status from their historian in real-time and use their system model to correlate breaker operations with specific feeder models and predict estimated fault locations.
- PQView can also import weather data from Environment Canada. This information can be correlated with PQView load and harmonic trend data and Historian data such as Dissolved Gas Accumulation to determine if a substation transformer needs to be de-rated or replaced.

Will I require specialized staff to use PQView?

- Many customers will have in-house engineers, PQ investigators and IT support staff that can learn the PQView system. Some customers may wish to keep human resources available for priority tasks and use a service provider such as CPS to administer and manage PQView for them — providing reports, data analysis and email alerts when skilled staff is required to follow-up. Some smaller customers may wish to use our 30+ years of expertise to collect and analyze their data over a secure Internet link and provide web-based access to the data and custom reports. It all comes down to the most cost efficient solution for the maximum gain.

Who do we buy PQView or Power Quality monitoring services from?

- CPS is the Canadian distributor for PQView and we are always available and ready to assist you and answer any of your questions. After you purchase PQView, we will work with you to offer installation and training services, ongoing support and any customization required to meet your needs.

Find out how CPS can help your business.

Contact us to learn more:

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