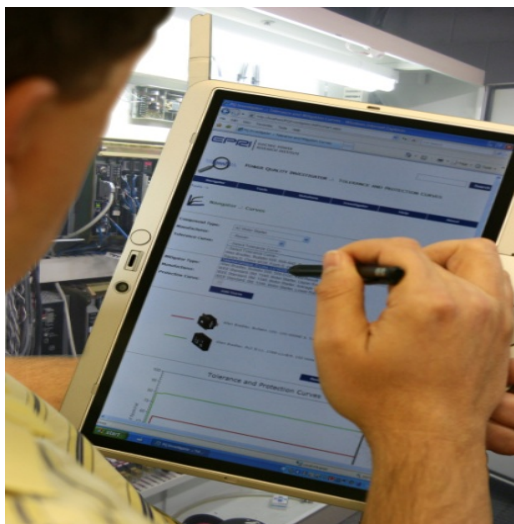


# Power Quality (PQ) Investigator



## Background, Objectives, and New Learnings

The PQ Investigator software tool captures EPRI's vast experience in investigating and solving end-user power quality (PQ) issues into an expert system. Based on 500 person-years of experience and hundreds of facility audits, this expert system allows for expedited and thorough investigation, diagnosis, and documentation of end-use PQ issues.

PQ Investigator contains information on 11 industrial sectors, 39 process areas, and nearly 1,000 voltage sag ride-through curves. It can be used to examine power quality issues at a high or narrow level, and can create detailed power quality audit reports. PQ Investigator can import user test data and PQ View data as well.

Users can take the PQ Investigator into the field on a laptop or mobile device (either pre-loaded or connected via web browser) to show customers the causes of, and solutions for, the PQ problems they are facing. This is particularly valuable for the industrial sector, which features a diverse range of processes, equipment, and power quality issues. The tool is useful for solving customer power quality issues and for internal training of engineering and customer support personnel.

To keep pace with the diversity and complexity of PQ issues

## Participants Receive:

- Access to latest PQ Investigator software releases
- Quarterly web training on PQ Investigator features
- Use case findings based on field investigations using the PQ Investigator
- Access to collaboration forum for users to inform potential enhancements
- Software support via telephone and e-mail
- PQ Investigator Users Group meetings and workshops

and challenges, and to reflect the very latest in EPRI experience, the PQ Investigator must be regularly updated. Moreover, like any software, PQ Investigator's features, functionality, and interface should be periodically refreshed to enhance the user experience. Finally, users need support resources to acquire the most value from PQ Investigator.

## Benefits

Project participants will principally benefit from access to the latest versions of the PQ Investigator tool, which can be used to educate personnel on power quality concepts and to diagnose and solve customer power quality problems in the field – thereby improving customer satisfaction.

PQ Investigator can be applied to address power quality issues specific to a given industry, process, or particular customer equipment category. It can even be used to create a virtual power quality model of a customer's facility with specific mitigation options and economic scenarios, with multi-level reporting features.

Project participants will also have an opportunity to inform future enhancements to PQ Investigator as part of a collaboration forum.

In addition, project participants will benefit from robust customer support for the PQ Investigator software via

telephone and e-mail.

Finally, project participants can participate in a user's group to collaborate and exchange experiences that help maximize the value of PQ Investigator.

### Technical Contact

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### Project Approach and Summary

This project is organized to provide enhancement, maintenance, and support for the PQ Investigator software, enabling funders to get the most out of this power quality investigation tool.

### Deliverables

- PQ Investigator software releases
- Quarterly web training on PQ Investigator features
- Use case findings based on field investigations using the PQ Investigator
- Collaboration forum for users to inform potential enhancements
- Software support via telephone and e-mail
- Invitation to annual PQ Investigator Users Group meetings and workshops

### Price of Project

There are two pricing tiers, based on annual distribution throughput. This project price is \$15,000 for utilities with annual distribution throughput less than 25,000 GWh, and \$25,000 for utilities with annual distribution throughput greater than 25,000 GWh. The price for participants without this metric is \$25,000.

### Project Status and Schedule

PQ Investigator is an ongoing supplemental project that supports, maintains, and develops successive versions and enhancements of the software tool. Participants can join at any time.

### Who Should Join

Electric utilities with customer support personnel and power quality engineers who need the ability to understand and diagnose customer power quality issues in the industrial sector should join this project.

### Contact Information

For more information, contact the EPRI Customer Assistance Center at 800.313.3774 ([askepri@epri.com](mailto:askepri@epri.com)).