

Power Quality Practitioner™ training for electric utility teams PQP-1Uts

“**practitioner** is one who brings an art or science to full realization”

Power Quality Inc (USA)/Power Quality Thailand LTD

Practical Power Quality best practices and training for engineers, technicians, system planners in electric utility customer service, technical support and engineering departments.

Objective for this training:

Increase the knowledge and effectiveness of these teams to work with Power Quality, Power Reliability, Quality of Supply and Energy Efficiency issues internally with the utility and with Customers.

Session 1. Understanding the basics of Power Quality: Definitions, Brief overview of the Power Quality parameters and the economic impact of various PQ parameters on equipment and customer impact. (Limited technical details for Executive overview)

Session 2. PQ parameter details for voltage stability, voltage imbalance, voltage sags and surges, characteristic measurements, monitoring setup, the sources, causes, effects on voltage quality and economic impact on utility and on utility customers (case studies)

Session 3. PQ parameters details for voltage transients (very fast, fast, slow), characteristic measurement, set up for monitoring, sources, causes, effects on voltage quality and economic impact on utility and on utility customers. (case study)

Session 4. PQ parameter details for harmonics and flicker fundamentals in the electrical network. Voltage and current harmonics. Harmonic power flow effects on voltage quality and economic impact on utility and on utility customers. (case study)

Session 5. PQ parameters details Harmonics Characteristics measurement, setup for monitoring, harmonic data analysis and solutions. Case study

Session 6. PQ Situations that are not related to supplied voltage but impact the user facility and result in Electric utility technical support. Grounding/Earthing, facility electrical design, electrical construction and non-technical issues. (case study)

Session 7. A brief over of the technologies of Power Quality solutions and mitigation for all PQ situations as related to the electrical utility. Case study of the most cost effective methods of mitigation.

Session 8. Power Quality vs Energy efficiency. As energy efficiency projects and products are implemented they have a significant impact on the susceptibility to PQ situations and an impact on the voltage quality from the utility and the load current distortion.

Session 9. Summary, final case studies and review

Duration 1 day approximately 7 hours