











## 5. Conclusion

Current indices only concern an area of the energy stakeholders: reliability or PQ. Until now researchers have not proposed scalable indexes on different time intervals and voltage ranges (LV-MV-HV). Aligned to new challenges, it is essential to monitor new indices that characterize the behavior of the power supply from a dynamic viewpoint, and bi-parametric analysis, and that reflects the temporal evolution of the quality of the energy and its deviation with respect to the terms stipulated in the contract.

The information behind data helps standardized methods for recording and manage database. In that sense, incorporating measurement satisfaction methods from prosumer and consumers-side is crucial considering the SG context. Indeed, it is crucial not only established probability indices of the poor power quality but also added criteria based on the customer experience, the intelligent instrumentation results, contractual issues and energy reports.

Empowering customers through smart metering is a way to better regulate the market and ensure its commitment to the final consumption of energy. The provision of information on households, consumption patterns and billing based actual consumption it is essential while household customers are being capable to recognize that the price of energy will also depend on their quality and the transitory nature of the power supply.

Finally, being connected to the grid it is still a suitable and desirable scenario for both, customers and suppliers that must interact with new intelligent devices that must accomplished reliability and PQ characteristics. New functionalities must be added to instrumentation in order to measure and storage both the power supply information and customer-prosumers satisfaction and perspective on the SG context.

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