

Kerala State Electricity Regulatory Commission
(Power Quality for Distribution System) Regulations, 2019.

The initiatives taken by the Honourable Regulatory Commission for specifying the main characteristics of power quality of electrical supply and ensuring quality and reliability of electricity supplied by the distribution licensee to the end consumers at the Point of common coupling (PCC) or at the supply terminals of Customers in the distribution system is highly appreciated. The Distribution Licensee has the responsibility of providing quality power to its consumers and the consumers have the right to enjoy quality power. Power Quality Regulation has been made with this objective and the Regulations in it specifies the allowable variation in each component and the measures required to ensure these.

However the following observations are made by In-Sdes regarding this:

- Ensuring each characteristic of power quality demands a highly reliable Distribution network with sufficient redundancy to minimise interruptions and a quality system to maintain the parameters of power quality. Also technologies like smart metering and smart grid has to be developed for effective monitoring and control. With the present Distribution network of KSEBL, it is practically difficult to attain this stage within a year or so. However KSEBL is implementing projects like Dyuthi for developing/improving the Distribution network to Global standards by 2021-22. Still, it takes time to bring the distribution network to such a standard as demanded by this regulation.
- The regulations demand installation of power quality monitors in all 11KV and 33KV feeders, all DTRs and at the PCC of designated consumers (which eventually necessitates all consumers), even though in a phased manner, for continuous monitoring of power quality. This requires a huge investment. Besides this, the cost for developing the distribution network to such a standard as to ensure the power quality also requires high investment. These costs has to be charged in ARR obviously. But this will bring a big burden to consumers.
- There are regulations in Supply code and Standard of performance Regulations that mandates the quality of power given to the consumers. Even these regulations are not strictly implemented by KSEBL. Priority shall be given for ensuring implementation of these regulations.
- Power pollutions like harmonics injected by certain consumers to the Grid is a matter of concern and there has to be measures to control this. Supply Code Regulation 23 addresses this and enables the Distribution Licensee to take effective measures to control this. Implementation of this has to be given importance.

There is no disagreement that Power Quality Regulations is a necessity for ensuring quality power to all consumers. However in the present condition of Distribution system and the circumstances in Kerala, it is felt that such a regulation that ensures best quality power to all, but at a high cost to common people is not an immediate requirement. Proper