

IEEE Standard for Harmonic Control in Electric Power Systems

IEEE Power and Energy Society

Developed by the
Transmission and Distribution Committee

IEEE Std 519™-2022
(Revision of IEEE Std 519-2014)

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of the
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Abstract: Goals for the design of electrical systems that include both linear and nonlinear loads are established in this standard. The voltage and current waveforms that may exist throughout the system are described, and waveform distortion goals for the system designer are established. The interface between sources and loads is described as the point of common coupling and observance of the design goals will reduce interference between electrical equipment.

This standard addresses steady-state limitations. Transient conditions exceeding these limitations may be encountered. This document sets the quality of power that is to be provided at the point of common coupling. This document does not cover the effects of radio-frequency interference; however, guidance is offered for wired telephone systems.

Keywords: harmonics, IEEE 519™, power quality, steady-state

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