Power Quality Study on a Distribution Circuit: A Case Study

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Abstract

Power quality disturbances are becoming more common as non-linear load continues to increase on the electric grid. This study gives the background investigation into a power quality disturbance that led to the subsequent investigation to identify possible non-compliance to IEEE STD 519 on a particular circuit and a review of Oncor’s capacitor placement philosophy.

Biography

Paul A. Thomas is an engineer with System Planning at Oncor Electric Delivery where he performs special studies and planning reviews. He received a bachelor of science in Electrical Engineering from the University of Texas at Austin in December 2013 and is registered with the Texas State Board of Professional Engineers as an Engineer-In-Training. His research interests include the development of new technology for locating faults in a power system, the use of renewable energy for demand response, and the use of new technology to increase transmission grid stability.