College of Engineering and Computer Science

Distinguished Speaker

CONSIDERATION OF 2-150 KHZ DISTURBANCES IN LV ENVIRONMENTS

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In the vast majority of cases, power line communication (PLC) for smart meter networks are located in the low voltage (LV) environment and must be designed to operate suitably in the presence of disturbances bounded by set compatibility levels (CLs). In Europe, without standardized limits for emissions in the frequency range allotted for smart meters (2-150 kHz), levels have reached the point where smart meter communication disturbances occur. As a result, the International Electrotechnical Commission (IEC) has a working group tasked with setting standards in the 2-150 kHz range. This talk is an evaluation of considerations for setting electromagnetic compatibility (EMC) limits for PLC.

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Elizabeth Devore is currently a doctoral student in Electrical Engineering at Auburn University, Auburn, AL. Her M.S. thesis work pertains to high frequency disturbances, in the 2-150 kHz range, regarding PLC for smart meter communication. Elizabeth has been a SIB member of FEEDER since fall 2014. She is a recipient of the Woltosz Fellowship from the Department of Electrical and Computer Engineering at Auburn and serves as the Vice President of Auburn's Graduate Student Council.

