

**Lessons from Field Damage Assessments about Communication Networks Power Supply and Infrastructure
Performance during Natural Disasters with a focus on Hurricane Sandy**
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Author bio: Alexis Kwasinski received his B.S. degree in electrical engineering in 1993 and a graduate specialization degree in communications in 1997. Before returning to school to earn his M.S. and Ph.D. degrees in electrical engineering from the University of Illinois at Urbana-Champaign in 2005 and 2007, respectively, he worked for 10 years in the communications industry, first designing and planning outside plant telephony networks for Telefonica and then working as a technical support engineer and technical consultant for Lucent Technologies Power Systems. Since 2007 Dr. Kwasinski has been working as a faculty member of The University of Texas at Austin. He has recently been promoted to the rank of Associate Professor with tenure (effective September 2013). As shown by his many publications, Dr. Kwasinski has performed substantial research in the area of communication systems performance during natural disasters. As part of this research he has conducted several field damage assessments after natural disasters. The most notable ones include hurricanes Katrina, Ike and Sandy, and the February 2010 and March 2011 earthquakes and tsunamis in the Maule Region of Chile and the Tohoku Region of Japan, respectively. In 2005 Dr. Kwasinski received the IEEE Power Electronics Society Joseph J Suozzi INTELEC Fellowship for his research about using microgrids to power communication facilities and in 2007 Dr. Kwasinski received the best paper award at the IEEE International Telecommunications Energy Conference for his work on improving power supply for communication networks during natural disasters. Dr. Kwasinski also received a National Science Foundation CAREER award to study the use of microgrids to improve power supply availability of critical loads—particularly communication sites—during natural disasters. Alexis Kwasinski is now the chair of a technical thrust within IEEE Power Electronics Society’s Technical Committee on Communications Energy Systems dedicated to improve communication networks infrastructure performance during natural disasters. He is also the Vice Chair of the Technical Committee of Electric Power and Telecommunications of the American Society of Civil Engineers (ASCE) Technical Council of Lifeline Earthquake Engineering. Dr. Kwasinski is also an active member of Austin’s smart grid initiative called Pecan Street, Inc.

Website links with sample information about his work on the effects of natural disasters on communication networks can be found at <http://users.ece.utexas.edu/~kwasinski/research.html>. A compilation of published material supporting the discussion in this abstract can be obtained in an 80 MB pdf file found at <http://users.ece.utexas.edu/~kwasinski/disasters%20comp.pdf>. Information and a preliminary report about Hurricane Sandy can be found at <http://users.ece.utexas.edu/~kwasinski/sandy.html> and <http://users.ece.utexas.edu/~kwasinski/preliminary%20telecom%20report%20v3%20comp.pdf>, respectively.