



Claudio A. Cañizares received his Electrical Engineering degree in April 1984 from the Escuela Politécnica Nacional (EPN), Quito-Ecuador, where he held different teaching and administrative positions from 1983 to 1993. His MSc (1988) and PhD (1991) degrees in Electrical Engineering are from the University of Wisconsin-Madison.

Prof. Cañizares is a Full Professor at the University of Waterloo, Department of Electrical and Computer Engineering (E&CE), the Hydro One Endowed Chair, and an Associate Director of the Waterloo Institute for Sustainable Energy (WISE). He was the Associate Chair of Graduate Studies (2000-2003), Deputy Chair (2003-2004), and Acting Chair (July-Aug. 2004) of the E&CE Department. In the 1999-2000 academic year, he was a Visiting Professor at the Dipartimento di Elettrotecnica of the Politecnico di Milano, and a research consultant for ENEL-Ricerca and CESI in Milan. During his 2006-2007 sabbatical leave, he was an Invited Professor at each of the following institutions: ETH, Zurich, Switzerland (Sept. - Oct. 2006); University of Castilla-La Mancha, Ciudad Real, Spain (Nov.-Dec.2006); and University of Seville, Spain (Jan.-Feb. 2007).

His research activities concentrate mostly on the study of nonlinear systems stability, control, modeling and computational issues in ac/HVDC/FACTS power systems, and more recently in the areas of microgrids, demand side management/demand response, electric vehicles, and multi-carrier energy systems, all within the context of competitive electricity markets and smart grids. In these areas, he has led or been an integral part of various grants and contracts from government agencies and companies totaling over to \$70 million dollars. Prof. Cañizares collaborates with industry and university researchers in Canada and abroad, and has supervised/co-supervised over 120 research fellows and graduate students (PDF, PhD, MASc, RA, URA and visiting scholars), several of whom have received various international, national and university awards. In 2003 he took a leadership role in the proposal and development of a highly successful Power Engineering online training program for industry professionals, with strong support and funding from Hydro One Networks Inc.

Prof. Cañizares has authored/co-authored over 260 journal and conference papers, as well as various technical reports, book chapters and patents, and has supported and participated in the development of the popular, free computer programs UWPflow and PSAT for power system analysis. He has been invited to make over 130 keynote speeches, seminars and presentations at many institutions and conferences worldwide, and to participate in several technical IEEE and CIGRE committees and special publications.

Prof. Cañizares is an active member of several IEEE and CIGRE committees, working groups and task forces. For several years, he was the Chair of the Voltage Stability Focus Group of the Power System Stability Subcommittee of the IEEE, for which he received an IEEE-PES Technical Committee Working

Group Recognition Award in June 2005. In addition, he was the editor, coordinator and one of the main co-authors of the major Subcommittee publication “Voltage Stability Assessment: Concepts, Practices and Tools,” which was granted the IEEE-PES Working Group Recognition Award for Outstanding Technical Report in June 2005. He is currently the elected Secretary of the IEEE-PES Power System Dynamic Performance (PSDP) Technical Committee, the former Chair and Secretary of the Power System Stability Controls Subcommittee of the PSDP, and the former/present Chair of the “Microgrid Stability”, “Microgrid Control,” and “Impact of Industry Restructuring on System Dynamic Performance” Task Forces of the PSDP Subcommittees, respectively, receiving in July 2012 a certificate of recognition for his outstanding contributions to the PSDP Committee. In 2007, he was granted the IEEE Fellow rank for his “contributions to voltage stability of power systems,” and was elected Fellow of the prestigious Royal Society of Canada in 2012 and of the Canadian Academy of Engineering in 2013 for outstanding contributions to power engineering research. He is a registered Professional Engineer in the province of Ontario, Canada.