



“Reinventing & Transforming the Energy System”
Alder Commons Hall Auditorium
at the University of Washington
April 4-5, 2018

Speaker: Dr. Farid Katiraei, Senior Director Renewables, Emerging Technologies, Quanta Technologies.



Title: Distribution Energy Resource Analysis 101

Abstract: This talk will provide an overview of the current status and prevalence DER technology’s being deployed nationally and internationally. It will discuss some of the impacts on utility businesses, engineering considerations (distribution system designs and planning), and day to day operation (monitoring and automation) - based on the DER types and penetration levels. It will cover some emerging grid support themes and DER analysis required to ensure safety and integrity of the grid. Example case studies will be provided to discuss experience from utilities in North America with large number of DERs and plans to build multiple utility microgrids. The talk is useful to those responsible for integrating DER, Energy Scheduling, Distribution Planning, Distribution Automation and Distribution Operations.

Bio: Dr. Farid Katiraei, Senior Director, Renewables, Emerging Technologies & Microgrids, Executive Advisor & Director, Quanta Technology Expert, has more than 7 years of design, modeling and implementation of power electronic apparatus for power system applications; dynamic system analysis and testing of emerging technologies and architectures for medium- and low-voltage distribution systems based on Mini-grid, Microgrid and Smart Grid approaches.

Prior to joining Quanta, Dr. Katiraei has been with Natural Resources Canada Energy Research Center (CANMETEnergy) in Varennes-Québec and CYME International where he has been involved in control and protection system design, grid interconnection, transient modeling, field testing, utility impact assessment of distributed and renewable energy resources and management of several pilot demonstration projects in the aforementioned areas. Dr. Katiraei received his PhD degree in electrical engineering from University of Toronto (Toronto, Canada) in 2005. He is an active member of IEEE, a steering committee member of international collaboration on Microgrids, and an active participant in several international standard development working groups as part of IEA and IEC taskforces. He is the author/co-author of several journal papers, conference publications and technical articles. His main interests include applications of power electronic apparatus and advanced automations in power systems; protection system design and coordination.

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