

Electric Power and Power Electronics Institute

WEEKLY SEMINAR SERIES – SPRING 2018

Monday, March 5, 2018, 3:00 p.m. – 4:00 p.m., ETB 1035

ADVANCED POWER SYSTEM ANALYTICS INDUCED BY SMART TECHNOLOGY – SOFTWARE TOOLS AND CONSULTING SERVICES EVOLUTION



Hala N. Ballouz, P.E.
President- Electric Power Engineers, Inc.

Abstract

Since the early 2000s our Transmission and Distribution of energy has undergone significant transformation starting with the deregulation of energy markets, to renewable energy development, all the way to distributed energy resources and smart technology. This has resulted in major changes in power system reliability and integration study models, needs and software tools.

A consultant to generation developers, utilities, municipalities and electric cooperatives in both transmission and distribution, the speaker will expose the audience to a new exciting world of power system consulting, and the challenges and opportunities resulting from the energy and power sector transformation.

The Seminar will address a) examples by cause – in new technology or market structures, and effect – in new models or software tools; b) the spectrum of knowledge and software tools necessary to be an expert consultant, c) the rising significance of flexibility in software tools available to consultants to meet the rapid change the industry is undergoing. The lecture will particularly focus on exposing the significant challenge the industry is facing in integrated analytics for planning due to lack of communication amongst the various utility software platforms.

Biography

Hala N. Ballouz has been a lead consultant in the electric power industry since 1991. She is the Owner and President of Electric Power Engineers, Inc. and has over 20 years' experience as Professional Engineer (P.E.) in power systems and energy market study.

Ms. Ballouz has been a consultant and advisor nationally and internationally with emphasis on Generation Resource Integration, Energy Market Analysis, Technology integration including Energy Storage, Transmission Grid Studies, Renewable Energy Generation Development and Design, Transmission Grid Planning Studies, Distribution System Planning and Operation, and Electric Distribution and Transmission Operation, Code and Regulation.

Hala has also founded GridNEXT, while President of the Texas Renewables Energy Association (TREIA), which is an initiative that aims at fostering grid modernization by focusing on grid technology integration, distributed energy resources (DERs), and energy of things. She is also a board member of several organizations in the energy industry. An accomplished industry author and presenter, Ms. Ballouz backs her work with certifications in substation engineering and design, wind energy technology and resource study, as well as power system modelling.

Ms. Ballouz has additionally served as expert witness on resource adequacy and transmission grid reliability in California and provides the same expertise in Texas.

Through an excellent team of power systems engineers, her company is on a path of growth to exceed 40% annually and is on the Aggie 100 list. She is currently leading the development of integrating smart grids into T&D planning and operation through innovative software development and application.