Distributed Energy Resources and the Impact to the Grid

A technical session for practitioners, researchers, policymakers, and university students

Date:

Tuesday September 19, 2017

Time:

6:00PM - 8:30PM

Location:

University of South Carolina Swearingen Engineering Center Room 1A03 300 Main Street Columbia, South Carolina 29208

Parking on campus:

Parking is available along South Main, Catawba and Assembly Streets

Register Online by 6:00PM on September 19th at

http://sites.ieee.org/Columbia

Additional Information:

Find more information on this IEEE Technical Session, other sessions, about IEEE, and joining IEEE at http://sites.ieee.org/columbia.

Technical Session At-A-Glance

This technical session will focus on the challenges associated with interconnecting Distributed Energy Resources (DER) from the perspective of a utility system protection and controls engineer. We will cover general information associated with DER types and the respective impacts to utility protection and reliability practices. We will also discuss how the transformers selected for these interconnections can provide benefit or create additional issues for both the DER and the utility. The fault response of various DER sites will be discussed and depictions of specific event data will be presented. A brief discussion regarding the global impact to the grid from these DER sources and the guidelines and requirements that are being drafted will be introduced and discussed. Specific introductions to the upcoming changes of IEEE1547 will be Typical commissioning steps taken by a utility to discussed. validate proper operation of the DER site as a system will also be introduced. *Note: This presentation is not affiliated with any specific utility* nor should it be construed to represent the opinions or requirements of any specific utility.

AGENDA-AT-A-Glance

6:00PM Networking & Dinner 6:15PM Greetings & Section Reports 6:25PM Presentations

Distributed Energy Resources and the Impact to the Grid Anthony E. Eason, PE, Utility System Protection and Controls Engineer

> University of South Carolina Power & Energy Group Dr. Roger Dougal, Lead

8:30PM Closing

