UI-ASSIST WEBINAR: Effect of behind-the-Meter DER on the Reliability of the distribution system and Quantification of Risk to the utility business

U.S. INDIA COLLABORATIVE FOR SMART DISTRIBUTION SYSTEM WITH STORAGE

Thursday, April 27, 9:00 am PT (9:30 pm IST)

Presenter: Arun Kumar Karngala (TAMU)

Reliability is an essential consideration for distribution planners and utility operators. Distribution planning was pretty simple with the radial unidirectional network, but with the proliferation of behind-the-meter resources and the nature of the bi-directionality they introduce in the network, planning has become a highly challenging problem. Bi-directionality introduces unique challenges to reliability assessment and impacts system reliability. Utility operators should also be wary of the potential loss to the business in the presence of DERs and increasing adoption of DERs. We discuss in this talk the impact of grid-supplemented adoption and grid defection on system reliability. A probabilistic risk quantification model will be presented, and the potential applications to utility planning will be discussed.

Please join our monthly UI-ASSIST webinar on April 27th, 9am – 10 am PST.

Join on your computer or mobile app

Click here to join the meeting

Or call in (audio only)

+1 509-498-6399,,297146207# United States, Spokane

Phone Conference ID: 297 146 207#

Find a local number | Reset PIN

Arun Kumar Karngala received his Bachelor of Technology in electrical engineering from the National Institute of Technology, Warangal, in May 2014. He is a doctoral candidate in the electrical engineering department at Texas A&M University in College Station, TX. Before that, he was employed with the National Mineral Development Corporation (NMDC) in India's NISP plant power distribution department for two years. He was the Director for the 5th Annual Texas Power and Energy Conference (TPEC) 2021. He received the Thomas W. Powell'62 and Powell Industries Inc. fellowship for the 2022 academic year. His primary research interests include reliability analysis of power systems, grid edge, behind-the-meter DER integration, Blockchain for energy, and energy for Blockchain.