

**Seminar – Spring 2019
Friday, March 1, 2018
9:10 a.m. – 10:10 a.m., ETB 1020**

**THE CREATION AND APPLICATIONS OF TIME SERIES
DATA IN SYNTHETIC POWER SYSTEMS**



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Abstract

Synthetic power systems are fictitious, but functionally and statistically similar to the actual bulk electric grid. They are synthesized based on public data of the actual power system, but they don't represent the actual grid that locate on the same geographic footprint or contain any confidential information about the actual grid, which makes them easily to be accessed, published and distributed.

Time series data in synthetic electric power systems represents different time-varying operating scenarios over the course of a year. It enables the synthetic grid's ability for longer term operation and economics studies such as time sequence SCOPF and Unit Commitment. This talk will be focusing on the creation and validation of time series data in synthetic power systems, and the applications of those data will also be covered.

Bio

Hanyue Li received the B.Sc. degree in electrical engineering from Illinois Institute of Technology, Chicago, IL, USA, in 2016, and the M.Sc. degree in electrical and computer engineering in Carnegie Mellon University, Pittsburgh, PA, USA, in 2017. She is currently

working toward the Ph.D. degree in electrical engineering at Texas A&M University, College Station, TX, USA.