

Welcome to the presentation on:

## Frequency Load Shedding in Industrial Power Grids

### Behnam Khaki



**UCLA**

**Where:** ITT Technical Institute  
12669 Encinitas Ave  
Sylmar, CA 91342

**When:** Thursday, February 11, 2016

6:30 – 7:00 PM : Pizza & Networking  
7:00 – 8:00 PM : Presentation

**No Cost, Space is limited –**  
**Please RSVP at registration link**  
[khaki-pes.eventbrite.com](http://khaki-pes.eventbrite.com)

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### Short Description of the Presentation

Under frequency relays are the most reliable tools for load shedding in active power generation deficiency conditions, especially in industrial power grids. In this presentation, the importance of dynamic modeling and transient stability analysis of industrial grids for under frequency load shedding relay (UFLSR) setting is discussed, and an algorithm for automatic UFLSR is presented. The presented algorithm utilizes a comprehensive transient stability module to find out the contingencies which are not safe for the operation of the plant and the load shedding actions are unavoidable. Under frequency load shedding relays are set such that the power grid preserves the electricity in service for critical loads, and frequency is maintained in permissible limits. In addition, the simulation results for the application of the algorithm in a real power plant are shown and discussed.

### Speaker's Biography

Behnam Khaki is a PhD student in Smart Grid Energy Research Center, UCLA. He got his second masters degree in electrical engineering from West Virginia University, in 2015, and the first masters degree from Amirkabir University of Technology, Tehran, Iran, in power systems. He also has 4 years of experience in power systems industry, where he was involved in high voltage and medium voltage substations and motor control center design.

Since 2013, he has been a student member of IEEE and Power And Energy Society (PES). His interest fields of study are power system control and protection, renewable energy integration into distribution systems, and stability analysis of dynamical systems.