KOUROSH SEDGHISIGARCHI
Associate Professor, Electrical & Computer Engineering, California State University, Northridge

1. Professional Preparation

Sharif University of Technology,	IRAN	Electrical Engineering	B.S 1993
Sharif University of Technology	IRAN	Electrical Engineering	M.S 1997
West Virginia University	USA	Electrical Engineering	Ph.D 2004

2. Academic Appointments

8/12 – Present	Tenured Associate Professor, ECE Department, CSUN, Northridge
8/06 – 8/12	Tenured Associate Professor, Electrical & Computer Engineering, WVUIT
8/04 – 8/06	Research Assistant Professor, Electrical Engineering, WVU
01/00- 05/04	Graduate Research Assistant, Electrical Engineering, WVU

2. Publications

Closely Related to the Proposed Project:

(1) K. Pourmostadam, K. Sedghisigarchi, "Teaching-Learning Based Optimization Method for PEV Scheduling incorporating PV units," *Accepted, Final Draft Submitted to CIRED,* June 2019.

(2) K. Sedghisigarchi, K. Talebizadeh, "An Adaptive Protection Strategy for Reliable Operation of Microgrids," *IEEE EnergyCon 2018*.

(3) K. Sedghisigarchi, Y. Eslami, A. Davari, "A Low-cost Efficient Hardware-in-the-loop Testbed for Distributed Generation Penetration Analysis," *Journal of Energy and Power Engineering (JEPE), No. 3 Proceedings*, **2017.**

(4) K. Sedghisigarchi, C., Sicat "Development of a Smart Microgrid Research and Educational Testbed," *IEEE SusTech*, Phoenix AZ, Nov **2017.**

(5) K. Sedghisigarchi, Y. Eslami, A. Davari, "A Hardware in the loop Testbed for Distributed Energy Generation Penetration Analysis," *IEEE EnergyCon 2016*, Leuven, Belgium, **2016.**

Other Selected Publications:

(6) K. Sedghisigarchi, Y. Eslami, A. Davari, S. Wilkerson, "A Real-Time Testbed for Coordinated Control of Inverters in LV Microgrids," *IEEE EnergyCon*, May 2014.

(7) **K. Sedghisigarchi**, Y. Eslami, A. Davari, "A Real-time Power Controller for Grid-Connected Inverters in LV Smart MicroGrids," *Journal of Energy and Power Engineering (JEPE)*, Dec 2013.

(8) **K. Sedghisigarchi**, Y. Eslami, A. Davari, "A Real-time Power Controller for Grid-Connected Inverters in LV Smart Microgrids," 2012 CIGRE Canada Conf, Montreal, ON, Sept 2012.

(9) **K. Sedghisigarchi**, and A. Feliachi, "Modeling and Control of Fuel Cells as Distributed Generators in Smart Grids," Chapter 20, "Smart Power Grids" by A. Keyhani, and M. Marwali, Springer-Verlag, 676 p. 431 illus., ISBN 978-3-642-21577-3, pp. 625-653, 2012.

(10) **K. Sedghisigarchi**, and A. Feliachi, "Impact of Fuel Cells on Load-Frequency Control in Power Distribution Systems," *IEEE Transactions on Energy Conversion*, vol. 21., no. 1, pp. 250-256, March 2006.

4. Synergistic Activities

(1) Advised a master's project "Plug-in EV Charging and Discharging Optimization in Microgrids"
- Received the first place poster award in *Energy Storage and Application Conf*, UC Riverside, CA, 2018
- A publication submitted for the final acceptance to CIRED 2019.

(2) "Microgrids Coordinated Protection", $20k Equipment donated to CSUN from Schweitzer Engineering Labs (SEL**),** 2016.
- Submitted a proposal for developing coordinated protection scheme
- Supervised a graduate student's project on adaptive protection research
- Resulted in an honor recognition poster award, and a journal publication in process.

(3) "Smart Home Energy Management System", IRA 2016, CSUN.
- Supervised more than 25 students in two and half years. This project received the best presentation award at College of Engineering competition last year.

(4) "Smart Grid and Alternative Energy Resources Educational Platform", CQF, July 2013.
- Received Campus Quality Fee grant to develop a smart distribution system.
- 30 students were involved in various teams to build the hardware
- Research results were published in *IEEE Sustainability Technology Conf.*, AZ, 2017

(5) Two real time inverter controllers were developed in a custom made hardware-in-the-loop (HIL) to analyze the impact active/reactive power controls of DC based distributed generators at West Virginia University Institute of Technology
- The research results were published in *Journal of Energy and Power Engineering (JEPE)*,