Alexandros I. Nikolaidis

Department of Electrical & Computer Engineering
University of Cyprus
Tel: +35796870670
E-mail: nikolaidis.alexandros@ucy.ac.cy
Webpage: http://psm.ucy.ac.cy/

EDUCATION:

- **PhD in Electrical Engineering.** Department of Electrical & Computer Engineering, University of Cyprus, Cyprus, (admitted Sept. 2012–expected graduation December 2016).
- **MSc Energy Technologies and Sustainable Design.** Interdepartmental Programme, School of Engineering, University of Cyprus, Cyprus, May 2012.
- **MEng in Electrical & Computer Engineering.** Department of Electrical & Computer Engineering, School of Engineering, Democritus University of Thrace, Greece, November 2010.

EMPLOYMENT:

Research Assistant/Associate: Department of Electrical & Computer Engineering, University of Cyprus, Cyprus	Sept. 2012 – Ongoing
Teaching Assistant: Department of Electrical & Computer Engineering, University of Cyprus, Cyprus	Sept. 2012 – Ongoing

RESEARCH INTERESTS:

- Power system planning
- Power system economics
- Energy policy
- Engineering Cost/Benefit Analysis and Risk Management of Renewable Energy Penetration
- Retail tariff design under increased Renewable Energy Penetration

SCHOLARSHIPS:

1. **Project Title: Engineering a Socio-Intelligent Class of Energy Users**
   - Funding Agency: University of Cyprus Grant "New Researchers" to support PhD Candidates (Awarded to C.A. Charalambous and **Alexandros I. Nikolaidis**), Feb. 2015- Feb 2016, €12,000 (Euros).

RESEARCH PROJECTS:

1. **Project Title: Analysis of the Present and Future Power Distribution System in Cyprus (GRID30)**
    - Funding Agency: Joint Research Centre, European Commission, July 2015–Feb. 2016.
2. **Project Title: Engineering a Socio-Intelligent Class of Energy Users**
    - Funding Agency: University of Cyprus Grant "New Researchers" to support PhD Candidates (Awarded to C.A. Charalambous and **Alexandros I. Nikolaidis**), Feb. 2015–Feb 2016, €12,000 (Euros).
3. **Project Title: Identifying The Hidden Costs of Net Metering Practices and Extrapolating Their Impact on Losses Cost and Benefit Allocation (HIDNET)**
    - Funding Agency: Distribution System Operator (DSO), Cyprus, Jan. 2015–Apr. 2016, ~€40,000 (Euros),

INDUSTRIAL CONSULTING PROJECTS:

1. ***For* Helios Project, Funded by Green+ NER 300 (EC, EIB, CY), Nicosia, Cyprus, *October 2014***
   "**Helios Solar Power Plant Integration in Cyprus Power System**" (Principle Investigators: G.E. Georghiou, Venizelos Efthimiou and C. A. Charalambous).
    - Sizing Storage Requirements for Integrating Helios Solar Power Plant in Cyprus Power System and Energy Market.

LIST OF PUBLICATIONS:

Book Chapters:

1. **A.I. Nikolaidis**, F. Gonzalez-Longatt and Charalambos A. Charalambous, "Indices to Assess the Integration of Renewable Energy Resources on Standard Test Networks through DIgSILENT's Programming Language (DPL)" in *"Power Factory Applications for Power System Analysis",* Publisher: Springer, 2015.
   http://www.springer.com/computer/theoretical+computer+science/book/978-3-319-12957-0

Peer Reviewed Journal Papers:

- **A.I. Nikolaidis***,* I. Koumparou, G. Makrides, V. Efthymiou, G.E. Georghiou and C. A. Charalambous**,** "'Reliable integration of a concentrating solar power plant in a small isolated system through an appropriately-sized battery energy storage system," IET Renewable Power Generation, January 2016, DOI: 10.1049/iet-rpg.2015.0337.

1. **A.I. Nikolaidis***,* A. Milidonis and C. A. Charalambous**,** "Impact of Fuel-Dependent Electricity Retail Charges on the Savings Value of Net-Metered PV Applications in Vertically Integrated Systems". Energy Policy, 2015, DOI:10.1016/j.enpol.2015.01.010.

2. C.A. Charalambous,**;** A Milidonis, A. Lazari and **A.I. Nikolaidis,** "Loss Evaluation and Total Ownership Cost of Power Transformers—Part I: A Comprehensive Method," Power Delivery, IEEE Transactions on, vol. 28, no. 3, pp. 1870–1880, July 2013.

3. **A.I. Nikolaidis**, F.G. Longatt and C.A. Charalambous, "Indices to Assess the Integration of Renewable Energy Resources on Transmission Systems," Journal of Conference Papers in Energy, vol. 2013, Article ID 324562, 8 pages, 2013. doi:10.1155/2013/324562, July 2013. (*selected for journal publication - best papers of POEM 2012 Conference).

Refereed International Conference Papers:

1. M. Panteli, **A.I. Nikolaidis**, Y. Zhou, F.R. Wood, S. Glynn, C.A. Charalambous, and P. Mancarella, "Analyzing the Resilience and Flexibility of Power Systems to Future Demand and Supply Scenarios", Accepted, IEEE Mediterranean Electrotechnical Conference (MELECON), 18-20 April, 2016, Limassol, Cyprus.

2. **A.I. Nikolaidis** and C. A. Charalambous, "A Critical Analysis of the Net Metering Practice in Cyprus", Accepted, IEEE Energy Conference (ENERGYCON 2016), 4-8 April 2016, Leuven, Belgium.

3. **A.I. Nikolaidis** and C. A. Charalambous, "Action Steps for Refining the Cyprus National Action Plan on RES Penetration for Electricity Generation- *should we reconsider*?" , Power Options for the Eastern Mediterranean Region Conference (POEM 2013), 7-8, October 2013, Nicosia, Cyprus.

Major Technical/Consulting Reports:

1. **A.I. Nikolaidis** and C.A Charalambous, *"Identifying the hidden costs of the Net Metering Practice in Cyprus and extrapolating their impact on losses cost/benefit allocation analysis",* Final Consulting Report submitted *for* Distribution System Operator (DSO) of Cyprus*,* Funded by Distribution System Operator (CY), March 2016.

2. **A.I. Nikolaidis** and C.A Charalambous, *"*Analysis of the Present and Future Power Distribution System in Cyprus: Substation load time series for 2014, 2020 and 2030*",* Final Consulting Report submitted *for* Joint Research Centre*,* Funded by European Commission (EC), February 2016.

3. **A.I. Nikolaidis** and C.A Charalambous, *"*Analysis of the Present and Future Power Distribution System in Cyprus: Identification of reference low voltage (LV) feeders*",* Final Consulting Report submitted *for* Joint Research Centre*,* Funded by European Commission (EC), January 2016.

4. **A.I. Nikolaidis,** C.A Charalambous et al *"Reliable Integration of Helios Power Plant in the Cyprus Power System",* Final Consulting Report submitted *for* Helios Project*,* Funded by Green+ NER 300 (EC, EIB, CY), December 2014.

Technology Products:

1. **"Net metering evaluation tool**" [online]: http://psm.ucy.ac.cy/net-metering-evaluation-tool/ The PSM lab offers a "Net-Metering Evaluation Tool" for whom it may concern in an effort to facilitate the informed promotion of PV technology at retail markets. The users can use the tool to simulate a known tariff structure or alternatively to simulate any generic flat or block-tiered volumetric electricity rates and thus assess the profitability of such an investment based on their personal consumption characteristics.