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Work Experience

Electrical Load Estimation Expert**Feb. 2017- April 2018**

- Tabriz Electric Power Distribution Company

Editorial Manager**March. 2019- Until Now**

- Journal of Energy Management and Technology (JEMT)
Website: <http://www.jemat.org/>

Education

University of Tabriz, Tabriz, Iran**Ph.D. in Electrical Engineering****Sept. 2018- March 2021**

- Research Area: Power System Operation, Energy Hub Systems, Energy Markets, Economic Analysis of Energy Systems, Energy Management, Energy Storage Systems, Demand Response, Smart Energy Systems, Renewable and Sustainable Energies
- Dissertation Title: Optimal Energy Management of Local Industrial Energy Hubs
- Supervisors: Prof. Behnam Mohammadi-Ivatloo, Dr. Mehdi Abapour
- Advisors: Dr. Mahmood Shafiee (Affiliation: University of Kent, Canterbury, UK), Prof. Amjad Anvari-Moghaddam (Affiliation: Aalborg University, Aalborg East, Denmark)

Sahand University of Technology, Tabriz, Iran**M.Sc. in Electrical Engineering****Sept. 2013- Sept. 2015**

- Research Area: Renewable Energy Systems and Energy Management
- Dissertation Title: Impact of Demand Side Management on the Energy Management Strategy of a Hybrid (Wind/PV/PSH) System in the Electricity Market
- Supervisor: Dr. Ahmad Sadeghi Yazdankhah
- Admitted to M.Sc. program without entrance exam as an Exceptional Talent student.

Azarbaijan Shahid Madani University, Tabriz, Iran
B.Sc. in Electrical Engineering**Sept. 2009-Jul. 2013**

- Research Area: Electricity Market and Demand Side Management
- Dissertation Title: Evaluation of Load Management Strategies in Electricity Market
- Supervisor: Dr. Reza Mohammadi

Awards and Honors

- Selected as the best bachelor student of Azarbaijan Shahid Madani University, in 2013.
- Admitted to M.Sc. program without entrance exam as an Exceptional Talent student.
- First rank award for M.Sc. degree of electrical (power systems as major field) engineering of Sahand University of Technology, in 2015.
- Member of exceptional talents center of Sahand University of Technology.
- Winner of Military Service's Grant, National Elite Organization of Iran, in 2016.
- Ranked 73rd among more than 2500 electrical engineering students in Ph.D. entrance exam, in 2018.
- Winner of Scholarship Award, National Elite Organization of Iran, in 2019, 2020, 2021.
- Member of Iran's National Elite Organization.
- Member of exceptional talents center of University of Tabriz.
- First rank award for Ph.D. degree of electrical (power systems as major field) engineering of University of Tabriz, in 2020.

Research Funding**Internationally:**

[P1] Co-PI, "Distributed energy storage allocation in partitioned areas of power system in order to reduce the greenhouse gas emission of traditional power plants in local industrial area", 1st MSRT– BMBF Joint Mobility (Cooperation between **Iran** and **Germany**), 2019.

German organization and cooperator: Prof. Dr. Eberhard Waffenschmidt, Cologne University of Applied Sciences, Köln, Germany.

[P2] Co-PI, "Assessment of maximum penetration capacity of renewable energy resources in interconnected energy hub networks", **IRAN (MSRT)** and **TURKEY (TUBITAK)** joint research project, 2020.

Turkish organization and cooperator: Dr. Ozan Erdinc, Yıldız Technical University, Istanbul, Turkey.

[P3] Co-PI, "Energy storage system planning in coordination with renewable sources in East Azerbaijan-Iran power system", **IRAN (MSRT)** and **TURKEY (TUBITAK)** joint research project, 2020.

Turkish organization and cooperator: Dr. Tuba Gözel, Gebze Technical University, Gebze, Turkey.

Nationally:

[P4] PI, "Utility oriented demand side management using smart AC and DC microgrids cooperative", Funded by Tabriz Electric Power Distribution Company, 2017.

[P5] Co-PI, "Modeling and analysis of demands of Tehran distribution Co. in different demand response programs and derivation the power outage cost", Funded by Tehran Electric Power Distribution Company, 2018.

[P6] Co-PI, "Preparation of standard instructions for design, manufacture, and testing of generator and power plant protection system", Niroo Research Institute (NRI), 2019.

[P7] Co-PI, "Investigation of requirements for implementation of IOT in Power Distribution Company of Mazandaran", Power Distribution Company of Mazandaran, 2019.

[P8] Co-PI, "Determining and pricing the price of electricity that can be sold in the distribution companies of Tehran and Mashhad", Niroo Research Institute (NRI), 2019.

Publications

Papers in JCR Journals

[1] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Mehdi Abapour, Mahmood Shafiee, and Amjad Anvari-Moghaddam, "Strategic operation of a virtual energy hub with the provision of advanced ancillary services in industrial parks," *IEEE Transactions on Sustainable Energy*, Submitted, **Second round revision**.

[2] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Mehdi Abapour, and Hasan Mehrjerdi, "Optimal scheduling of demand response aggregators in industrial parks based on load disaggregation algorithm," *IEEE Systems Journal*, **Accepted, 13 April 2021**.

[3] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Mehdi Abapour, Mahmood Shafiee, and Amjad Anvari-Moghaddam, "Privacy-preserving mechanism for collaborative operation of high-renewable power systems and industrial energy hubs," *Applied Energy*, vol. 238, 2021, p. 116338.

[4] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Ozan Erdinc, and Fatma Gulsen Erdinc, "Optimal allocation of renewable sources and energy storage systems in partitioned power networks to create supply-sufficient areas," *IEEE Transactions on Sustainable Energy*, vol. 12 (2), 2021, pp. 999-1008.

[5] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Mehdi Abapour, Mahmood Shafiee, and Amjad Anvari-Moghaddam, "Techno-economic and environmental assessment of the coordinated operation of regional grid-connected energy hubs considering high penetration of wind power," *Journal of Cleaner Production*, vol. 280, 2021, p. 124275.

[6] **Morteza Zare Oskouei**, Mohammad Amin Mirzaei, Behnam Mohammadi-Ivatloo, Mahmood Shafiee, Mousa Marzband, and Amjad Anvari-Moghaddam, "A hybrid robust-stochastic approach to evaluate the profit of a multi-energy retailer in tri-layer energy markets," *Energy*, vol. 241, 2021, p. 118948.

[7] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Mehdi Abapour, Reza Razzaghi, "Optimal stochastic scheduling of reconfigurable active distribution networks hosting hybrid renewable energy systems," *IET Smart Grid*, DOI: <https://doi.org/10.1049/stg2.12029> .

- [8] Mohammad Amin Mirzaei, **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Abdollah Loni, Kazem Zare, Mousa Marzband, and Mahmood Shafiee, "Integrated energy hub system based on power-to-gas and compressed air energy storage technologies in the presence of multiple shiftable loads", *IET Generation, Transmission & Distribution*, vol. 14 (13), 2020, pp. 2510-2519.
- [9] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Mehdi Abapour, Amjad Anvari-Moghaddam, and Hasan Mehrjerdi, "Practical implementation of residential load management system by considering vehicle-for-power transfer: Profit analysis", *Sustainable Cities and Society*, vol. 60, 2020, p. 102144.
- [10] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Mehdi Abapour, Ali Ahmadian, and Md. Jalil Piran, "A novel economic structure for improvement of energy label in the smart residential buildings under energy efficiency programs", *Journal of Cleaner Production*, vol. 260, 2020, p. 121059.
- [11] **Morteza Zare Oskouei** and Ahmad Sadeghi Yazdankhah, "The role of coordinated load shifting and frequency-based pricing strategies in maximizing hybrid system profit", *Energy*, vol. 135, 2017, pp. 370-381.
- [12] **Morteza Zare Oskouei** and Ahmad Sadeghi Yazdankhah, "Scenario-based stochastic optimal operation of wind, photovoltaic, pump-storage hybrid system in frequency-based pricing", *Energy Conversion and Management*, vol. 105, 2015, pp. 1105-1114.

Conference Papers

- [C1] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Payam Teimourzadeh Baboli, and Davood Babazadeh, "Robust stochastic optimization for energy sharing between multi-carrier microgrids using transactive energy management system", ETG-Kongress, Germany, 2021.
- [C2] **Morteza Zare Oskouei**, Behnam Mohammadi-Ivatloo, Mehdi Abapour, and Reza Razzaghi, "Two-stage stochastic model for optimal scheduling of reconfigurable active distribution networks with renewable energy", 9th International Conference on Power and Energy Systems (ICPES), Perth, Australia, 2019.
- [C3] **Morteza Zare Oskouei** and Meysam Sadeghi, "Evaluating the impact of DC micro grid consist of photovoltaic and fuel cell on demand side management strategies in the distribution network", 23rd Electrical Power Distribution Conference, Tehran, Iran, 2018.

Books and Book Chapters

- [B1] **Morteza Zare Oskouei** and Behnam Mohammadi-Ivatloo, "Integration of Renewable Energy Sources Into the Power Grid Through PowerFactory", Springer, 2020.

- [BC1] **Morteza Zare Oskouei**, Hadi Nahani, Behnam Mohammadi-Ivatloo, and Mehdi Abapour, "Optimal Scheduling of Hybrid Energy Storage Technologies in the Multi-Carrier Energy Networks." In: Nazari-Heris M., Asadi S., Mohammadi-Ivatloo B. (eds) *Planning and Operation of Multi-Carrier Energy Networks*, Springer, 2021.

Workshops Lecture

- [1] **LATEX Workshop: Organizing journals and international conferences papers**, Organized by: Iran Energy Association (IEA), 2020.
- [2] **Integration of renewable energy sources into the power grid via DIgSILENT PowerFactory**, Organized by: Iran Energy Association (IEA), 2021.

Service to Professional Society

- **Served as reviewer for the following journals:**
 - Reviewer of IEEE Transactions on Power Systems
 - Reviewer of IEEE Transactions on Sustainable Energy
 - Reviewer of IEEE Power Engineering Letters
 - Reviewer of IEEE Access
 - Reviewer of International Journal of Electrical Power and Energy Systems
 - Reviewer of Energy
 - Reviewer of Energy Conversion and Management
 - Reviewer of Journal of Cleaner Production
 - Reviewer of IET Generation, Transmission & Distribution
 - Reviewer of IET Renewable Power Generation
 - Reviewer of European Transactions on Electrical Power (John Wiley)

Software Expertise

- DlgSILENT PowerFactory
- GAMS
- MATLAB
- LATEX
- PSAT
- MATPOWER

References

- Prof. Behnam Mohammadi-ivatloo, Department of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran, bmohammadi@tabrizu.ac.ir
- Prof. Amjad Anvari-Moghaddam, Department of Energy Technology, Aalborg University, 9220 Aalborg East, Denmark, aam@et.aau.dk
- Dr. Davood Babazadeh, Technische Universitaet Hamburg, Hamburg, Germany, davood.babazadeh@tuhh.de
- Dr. Hasan Mehrjerdi, Department of Electrical Engineering, Qatar University, Doha, Qatar, hasan.mehrjerdi@qu.edu.qa
- Dr. Mehdi Abapour, Department of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran, abapour@tabrizu.ac.ir
- Dr. Mahmood Shafiee, Mechanical Engineering Group, School of Engineering, University of Kent, Canterbury CT2 7NT, UK, m.shafiee@kent.ac.uk