Ali Zangeneh, Ph.D
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Research interests:

Power System operation and planning
Distribution system
Distributed generation and storage
Microgrid and smart grid
Optimization techniques
Electricity markets
Resiliency

Courses:

- Power System Analysis I, II
- Circuit Analysis I, II
- Overhead Transmission Line Design
- Distributed Generation and Microgrid
- Linear and Non-linear optimization
- Power System Operation and Control

Journal Papers:

1. Ali Zangeneh, Shahram Jadid, Ashkan Rahimi-Kian, Normal boundary intersection and benefit–cost ratio for distributed generation planning, International Transactions on Electrical Energy Systems, Vol. 20, No. 2, 2010, pp. 97-113.

2. Ali Zangeneh, Shahram Jadid, Ashkan Rahimi-Kian, Promotion strategy of clean technologies in distributed generation expansion planning, Renewable Energy, Vol. 34, No. 12, 2009, pp. 2765-2773.

3. Ali Zangeneh, Shahram Jadid, Ashkan Rahimi-Kian, A hierarchical decision making model for the prioritization of distributed generation technologies: A case study for Iran, Energy Policy, Vol. 37, No. 12, 2009, 5752-5763.

4. Ali Zangeneh, Ahad Kazemi, Majid Hajatipour, Shahram Jadid, A Lyapunov theory based UPFC controller for power flow control, Electrical Power and Energy Systems, Vol. 31, 2009, pp. 302–308.

5. A. Zangeneh, and S. Jadid, "Fuzzy multiobjective model for distributed generation expansion planning in uncertain environment," International Transactions on Electrical Energy Systems, Vol. 21, No. 1, 2011, pp. 129-141.

6. A. Zangeneh, S. Jadid, and A. Rahimi-Kian, "Uncertainty based distributed generation expansion planning in electricity markets," Electrical Engineering (springer), Vol. 91, No. 7, 2010, pp. 369-382.

7. A. Zangeneh, S. Jadid, and A. Rahimi-Kian, "A fuzzy environmental-technical-economic model for distributed generation planning," Energy, Vol. 36, 2011, pp. 3437-3445.

8. A. Shayegan-Rad, A. Badri, A. Zangeneh, Day-ahead scheduling of virtual power plant in joint energy and regulation reserve markets under uncertainties, Energy, Vol. 121, 2017, pp. 114-125.

9. Fatemeh Barati, Shahram Jadid, Ali Zangeneh, A new approach for DG planning at the viewpoint of the independent DG investor, a case study of Iran, International Transactions on Electrical Energy Systems, Vol. 27, No. 6, 2017.

10. Farshid Nazari, Ali Zangeneh and Ali Shayegan-Rad, A Bilevel Scheduling Approach for Modeling Energy Transaction of Virtual Power Plants in Distribution Networks, Iranian Journal of Electrical & Electronic Engineering, Vol. 13, No. 1, 2017, pp. 1-9.

11. Milad Zarei, Ali Zangeneh, Multi-objective optimization model for distribution network reconfiguration in the presence of distributed generations, International Transactions on Electrical Energy Systems, Vol. 27, No. 12, 2017.

12. Ali Shayegan Rad and Ali Zangeneh, A Stochastic Bilevel Scheduling Model for the Determination of the Load Shifting and Curtailment in Demand Response Programs, Journal of Electrical Engineering & Technology , Vol. 13, No. 3, 2018, pp. 1069-1078.

13. Ali Zangeneh, Ali Shayegan-Rad and Farshid Nazari, A Multi Leader-Follower Game Theory for Optimal Contract Pricing of Virtual Power Plants in Smart Distribution Networks, IET Generation, Transmission & Distribution, IET Generation, Transmission & Distribution, Vol. 12, No. 21, 2018, pp. 5747-5752.

14. Fatemeh Barati, Shahram Jadid, Ali Zangeneh, Private investor-based distributed generation expansion planning considering uncertainties of renewable generations, Energy, Vol. 173, 2019, pp. 1078-1091.

15. Ali Shayegan-Rad and Ali Zangeneh, Optimal Contract Pricing of Load Aggregators for Direct Load Control in Smart Distribution Systems, Turkish Journal of Electrical Engineering & Computer Sciences, Vol. 27, No. 1, 2019, 167-180.

16. Ali Zangeneh, Optimal design of onshore wind farm collector system using particle swarm optimization and Prim's algorithm, Revue Roumaine Des Sciences Techniques-Serie Electrotechnique et energetique, Vol. 64, No. 4, 2019, pp. 349-356.

17. F Kouhian, A Zangeneh, JR Martí, Three-based level model to determine optimal scheduling of the MG integrated operation using Benders decomposition, IET Generation, Transmission & Distribution, Vol. 13, No. 20, 2019, pp. 4712-4723.

18. A Shayegan Rad, A Badri, A Zangeneh, M Kaltschmitt, Risk- based optimal energy management of virtual power plant with uncertainties considering responsive loads, International Journal of Energy Research, Vol. 43, No. 6, 2019, 2135-2150.

19. F Khavari, A Badri, A Zangeneh, Energy management in multi-microgrids via an aggregator to override point of common coupling congestion, IET Generation, Transmission & Distribution, Vol. 13, No. 5, 2018, pp. 634-642.

20. F Khavari, A Badri, A Zangeneh, Energy management in multi-microgrids considering point of common coupling constraint, International Journal of Electrical Power & Energy Systems, Vol. 115, 2020, pp. 1054-65.

21. Seysed Mohammad Hoseini, Nastaran Vasegh and Ali Zangeneh, Robust hybrid control of output power for three-phase grid connected PV system, International Journal of Industrial Electronics, Control and Optimization, Vol. 2, No. 4, 2019, pp. 365-372.

22. Farhad Kouhian and Ali Zangeneh, Scheduling Operation of an Integrated Microgrid Considering Spinning Reserve and Uncertainties of Demand and Distributed Energy Resources, Iranian Electric Industry Journal Of Quality And Productivity, Vol 6, No.11, 2017, pp. 149-159, (in Persian).

23. Seysed Mohammad Hoseini, Nastaran Vasegh and Ali Zangeneh, Distributed Nonlinear Robust Control for Power Flow in Islanded Microgrids, Iranian Journal of Electrical and Electronic Engineering,

24. M. Horoufiany, A. Zangeneh, R. Ghandehari, A Multi-Objective Reactive Power Pricing Approach of Distributed Generation Units within Distribution Networks, Electrical Engineering Journal of Tabriz University, Vol. 46, No. 3, 2015, pp. 149-159 (in Persian).

25. Mohammad Reza Fallahzadeh, Ali Zangeneh, A bilevel programming model of electric vehicles' aggregator for bidding strategy in the distribution network, Electrical Engineering Journal of Tabriz University, Vol. 48, No. 4, 2019, pp. 1699-1709 (in Persian).

26. H Nosratpoor, A Zanganeh, Optimal Self-healing of Smart Distribution Grids Based on Spanning Trees to Improve System Reliability. Journal of Iranian Association of Electrical and Electronics Engineers. Vol. 16, No. 1, pp. 91-101 (in Persian).

Conference Papers (in English):

1. Ali Zangeneh, Shahram Jadid, Ashkan Rahimi-Kian, Risk exposure of distributed generation planning using ANN, In: Proceeding of International Conference of Electrical Engineering (ICEE 2009), Tehran, Iran, 2009.

2. Ali Zangeneh, Shahram Jadid, Ashkan Rahimi-Kian, Strategic policy making for prioritization of distributed generation technologies in Iran, Accepted in Alternative Energy Application Conference, Kuwait 2009.

3. Ali Zangeneh, Shahram Jadid, Ashkan Rahimi-Kian, Economic quantification of distributed generation benefits in power quality enhancement of distribution network, Accepted in Alternative Energy Application, Kuwait 2009.

4. Ali Zangeneh, Shahram Jadid, Ashkan Rahimi-Kian, A hybrid approach of marginal benefit and normal boundary intersection algorithm for distributed generation planning, In: Proceeding of 22th International Power System Conference, Tehran, Iran, 2007.

5. Ali Zangeneh, Shahram Jadid, Ashkan Rahimi-Kian, Clean technologies development based on a grant function in distributed generation planning, In: Proceeding of NAPS 2008.

6. Ali Zangeneh, Shahram Jadid, Normal boundary intersection for generating Pareto set in distributed generation planning, In: Proceeding of IPEC'07, (2007) 1077-1082.

7. Ali Zangeneh, Shahram Jadid, Goal attainment programming based algorithm for distributed generation planning, In: Proceeding of 1st Power Engineering and Optimization Conference (PEOCO 2007), Shah Alam, Malaysia.

8. Ali Zangeneh, Shahram Jadid, Ahad Kazemi, Transient contingency ranking using several severity indices based on hybrid transient energy function and time domain simulation, In: Proceeding of 20th International Power System Conference, Tehran, Iran, 2005.

9. Ali Zangeneh, Majid Hajatipour, Shahram Jadid, Voltage stability monitoring based on Nearest Neighborhood Algorithm of fuzzy clustering and Modal analysis, In: Proceeding of 19th International Power System Conference, Tehran, Iran, 2004.

10. Ali Zangeneh, Ahmad Gholami, A new method for calculation of corona inception voltage in stranded conductors of overhead transmission lines, In: Proceeding of 20th International Power System Conference, Tehran, Iran, 2005.

11. Ali Shayganrad, Ali Badri and Ali Zangeneh, Day ahead scheduling for virtual power plant to participate in energy and spinning reserve markets, 29th International Power System Conference, Tehran – Iran, 2014.

12. Morteza Shafiekhani, Ali Badri, Ali Zangeneh and Aliakbar Maroosi, A multiobjective optimization approach in virtual power plant for bidding in day-ahead market considering Lexicographic optimization, 5th Smart Grid Conference (SGC14), Tehran, Iran.

13. Farzad Fallahi, Ali Zangeneh and Peyman Naderi, A novel hybrid algorithm to achieve desirable protection coordination between recloser and fuses with increasing penetration of distributed generators in distribution system, 2th Cired Regional Conference, Tehran, Iran, 2014.

Books:

Book Chapters:

1. A Zangeneh, M Moradzadeh, Self-healing: Definition, Requirements, Challenges and Methods, Microgrid Architectures, Control and Protection Methods, Springer, pp. 509-525.

2. P Zafari, A Zangeneh, M Moradzadeh, A Ghafouri, MA Parazdeh, Various Droop Control Strategies in Microgrids, Microgrid Architectures, Control and Protection Methods, Springer, pp. 527-554.

3. MR Fallahzadeh, A Zangeneh, An Interactive Model for the Participation of Electric Vehicles in the Competitive Electricity Market, Electric Vehicles in Energy Systems, springer, pp. 233-247.

4. M Shafiekhani, A Zangeneh, Integration of Electric Vehicles and Wind Energy in Power Systems, Electric Vehicles in Energy Systems, Springer, pp. 165-181.

Industrial Projects:

۱. پروژه نظارت بر پژوهش و بررسی مدل بازار عمده‌فروشی برق کشور و تعیین نقاط ضعف و قوت آن و ارایه راهکارهای مناسب جهت توسعه، تغییر ساختار و تعاملات آتی بازار عمده‌فروشی با بازارهای بورس و دوجانبه، کارفرما: شرکت مدیریت شبکه برق ایران.

Social Environment:

1. Google Scholar:
   https://scholar.google.com/citations?hl=en&user=IqCqcB4AAAAJ
2. Researchgate:
   https://www.researchgate.net/profile/Ali_Zangeneh3?ev=hdr_xprf
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