

Curriculum Vitae

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Education:

B.Sc. in Electrical Engineering, Sharif University of Technology, Iran, 1980

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✓ Research Interests

- Future Grids
- Smart Grids
- Microgrids
- Energy Management
- Integration of Renewable Energy in Power System
- Planning and Control of Power Systems
- Eletrical Energy Storage

✓ Courses Taught

- Smart Grids
- Energy Management
- Modern Control Systems
- Optimization in Power Systems
- Computer Application in Power Systems
- Renewable Energy
- Design of Power Systems Control Centers
- Power System Dynamics
- Power System Analysis

✓ Journal Papers:

- [1] M. H. Amini, **M. P. Moghaddam**, and O. Karabasoglu, "Simultaneous allocation of electric vehicles' parking lots and distributed renewable resources in smart power distribution networks," *Sustain. Cities Soc.*, vol. 28, pp. 332–342, 2017.
- [2] S. Bahramara, **M. P. Moghaddam**, and M. R. Haghifam, "Optimal planning of hybrid renewable energy systems using HOMER: A review," *Renewable and Sustainable Energy Reviews*, vol. 62, pp. 609–620, 2016
- [3] S. Bahramara, **M. P. Moghaddam**, and M. R. Haghifam, "A bi-level optimization model for operation of distribution networks with micro-grids," *Int. J. Electr. Power Energy Syst.*, vol. 82, pp. 169–178, 2016.
- [4] M. I. Alizadeh, **M. P. Moghaddam**, N. Amjadi, P. Siano, and M. K. Sheikh-El-Eslami, "Flexibility in future power systems with high renewable penetration: A review," *Renew. Sustain. Energy Rev.*, vol. 57, pp. 1186–1193, 2016.
- [5] M.-H. Shariatkah, M.-R. Haghifam, M. Parsa-Moghaddam, and P. Siano, "Evaluating the reliability of multi-energy source buildings: A new analytical method for considering the dynamic behavior of thermal loads," *Energy Build.*, vol. 126, pp. 477–484, 2016.
- [6] M. Shafie-khah, E. Heydarian-Forushani, M. E. H. Golshan, P. Siano, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and J. P. S. Catalão, "Optimal trading of plug-in electric vehicle aggregation agents in a market environment for sustainability," *Appl. Energy*, vol. 162, pp. 601–612, 2016.
- [7] M. H. Shariatkah, M. R. Haghifam, G. Chicco, and **M. Parsa-Moghaddam**, "Modelling the operation strategies of storages and hydro resources in adequacy analysis of power systems in presence of wind farms," *IET Renewable Power Generation*, vol. 10, no. 8, pp. 1059–1068, 2016.
- [8] M.-H. Shariatkah, M.-R. Haghifam, G. Chicco, and **M. Parsa-Moghaddam**, "Adequacy modeling and evaluation of multi-carrier energy systems to supply energy services from different infrastructures," *Energy*, vol. 109, pp. 1095–1106, 2016.
- [9] M. Yazdani-Damavandi, **M. P. Moghaddam**, M. R. Haghifam, M. Shafie-Khah, and J. P. S. Catalão, "Modeling operational behavior of plug-in electric vehicles' parking lot in multienergy systems," *IEEE Transactions on Smart Grid*, vol. 7, pp. 124–135, 2016
- [10] M. Shafie-Khah, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "Ex-ante evaluation and optimal mitigation of market power in electricity markets including renewable energy resources," *IET Generation, Transmission and Distribution*, vol. 10, pp. 1842–1852, 2016.
- [11] H. A. Aalami, **M. P. Moghaddam**, and G. R. Yousefi, "Evaluation of nonlinear models for time-based rates demand response programs," *Int. J. Electr. Power Energy Syst.*, vol. 65, pp. 282–290, 2015.
- [12] M.-H. Shariatkah, M.-R. Haghifam, M. Parsa-Moghaddam, and P. Siano, "Modeling the reliability of multi-carrier energy systems considering dynamic behavior of thermal loads," *Energy Build.*, vol. 103, pp. 375–383, 2015.
- [13] M. Shafie-Khah, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and J. P. S. Catalão, "Optimised performance of a plug-in electric vehicle aggregator in energy and reserve markets," *Energy Conversion and Management*, vol. 97, pp. 393–408, 2015.

- [14] M. Shafie-Khah, E. Heydarian-Forushani, M. E. H. Golshan, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and J. P. S. Catalão, "Strategic offering for a price-maker wind power producer in oligopoly markets considering demand response exchange," *IEEE Transactions on Industrial Informatics*, vol. 11, pp. 1542-1553, 2015.
- [15] E. Heydarian-Forushani, M. E. H. Golshan, **M. P. Moghaddam**, M. Shafie-Khah, and J. P. S. Catalão, "Robust scheduling of variable wind generation by coordination of bulk energy storages and demand response," *Energy Conversion and Management*, vol. 106, pp. 941-950, 2015.
- [16] M. Y. Damavandi, **M. P. Moghaddam**, M. R. Haghifam, M. Shafie-khah, and J. P. S. Catalão, "Modeling reserve ancillary service as virtual energy carrier in multi-energy systems," in *IFIP Advances in Information and Communication Technology* vol. 450, ed, 2015, pp. 431-439.
- [17] S. Bahramara, **M. P. Moghaddam**, and M. R. Haghifam, "Modelling hierarchical decision making framework for operation of active distribution grids," *IET Generation, Transmission and Distribution*, vol. 9, pp. 2555-2564, 2015.
- [18] M. Shafie-Khah, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and J. P. S. Catalão, "Fast and accurate solution for the SCUC problem in large-scale power systems using adapted binary programming and enhanced dual neural network," *Energy Conversion and Management*, vol. 78, pp. 477-485, 2014.
- [19] M. M. Moghaddam, M. H. Javidi, **M. P. Moghaddam**, and M. O. Buygi, "Reliability-based generation resource planning in electricity markets," *Turkish Journal of Electrical Engineering and Computer Sciences*, vol. 22, pp. 909-923, 2014.
- [20] E. Heydarian-Forushani, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, M. Shafie-Khah, and J. P. S. Catalão, "A stochastic framework for the grid integration of wind power using flexible load approach," *Energy Conversion and Management*, vol. 88, pp. 985-998, 2014.
- [21] E. Heydarian-Forushani, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, M. Shafie-Khah, and J. P. S. Catalão, "Risk-constrained offering strategy of wind power producers considering intraday demand response exchange," *IEEE Transactions on Sustainable Energy*, vol. 5, pp. 1036-1047, 2014.
- [22] E. Heydarian-Forushani, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, M. Shafie-khah, and J. P. S. Catalao, "Risk-Constrained Offering Strategy of Wind Power Producers Considering Intraday Demand Response Exchange," *IEEE Transactions on Sustainable Energy*, 2014.
- [23] M. Y. Damavandi, **M. P. Moghaddam**, M. R. Haghifam, M. Shafie-khah, and J. P. S. Catalão, "Stochastic modeling of plug-in electric vehicles' parking lot in smart multi-energy system," in *IFIP Advances in Information and Communication Technology* vol. 423, ed, 2014, pp. 332-342.
- [24] P. T. Baboli, M. Shahparasti, **M. P. Moghaddam**, M. R. Haghifam, and M. Mohamadian, "Energy management and operation modelling of hybrid AC-DC microgrid," *IET Generation, Transmission and Distribution*, vol. 8, pp. 1700-1711, 2014.
- [25] Sheikhi Fini, **M. Parsa Moghaddam**, and M. K. Sheikh-El-Eslami, "An investigation on the impacts of regulatory support schemes on distributed energy resource expansion planning," *Renewable Energy*, vol. 53, pp. 339-349, 2013.
- [26] M. Shafie-khah, **M. Parsa Moghaddam**, and M. K. Sheikh-El-Eslami, "Development of a virtual power market model to investigate strategic and collusive behavior of market players," *Energy Policy*, vol. 61, pp. 717-728, 2013.
- [27] M. Moradijoz, **M. Parsa Moghaddam**, M. R. Haghifam, and E. Alishahi, "A multi-objective optimization problem for allocating parking lots in a distribution network," *International Journal of Electrical Power and Energy Systems*, vol. 46, pp. 115-122, 2013.
- [28] M. M. Moghaddam, M. H. Javidi, **M. P. Moghaddam**, and M. O. Buygi, "Coordinated decisions for transmission and generation expansion planning in electricity markets," *International Transactions on Electrical Energy Systems*, vol. 23, pp. 1452-1467, 2013.
- [29] S. Goleijani, T. Ghanbarzadeh, F. Sadeghi Nikoo, and **M. Parsa Moghaddam**, "Reliability constrained unit commitment in smart grid environment," *Electric Power Systems Research*, vol. 97, pp. 100-108, 2013.
- [30] R. Dashti, S. Yousefi, and **M. Parsa Moghaddam**, "Comprehensive efficiency evaluation model for electrical distribution system considering social and urban factors," *Energy*, vol. 60, pp. 53-61, 2013.
- [31] H. R. Arasteh, **M. Parsa Moghaddam**, M. K. Sheikh-El-Eslami, and A. Abdollahi, "Integrating commercial demand response resources with unit commitment," *International Journal of Electrical Power and Energy Systems*, vol. 51, pp. 153-161, 2013.
- [32] Hamidreza Arasteh, **M. Parsa Moghaddam**, Mouhamad Kazem sheikh aleslami, Miad reza Shafie-khah, "Bidding Strategy in Demand Response Exchange Market", , " *Journal of Iranian Association of Electrical and Electronics Engineers*, no. 2, pp. 1-9, 2013.
- [33] M. Shafie-khah, **M. Parsa Moghaddam**, M. K. Sheikh-El-Eslami, and M. Rahmani-Andebili, "Modeling of

interactions between market regulations and behavior of plug-in electric vehicle aggregators in a virtual power market environment," *Energy*, vol. 40, pp. 139-150, 2012.

- [34] S. H. Hosseini, H. Kord, **M. Parsa Moghaddam**, and F. Merikh Bayat, "A new mathematical clustering-based approach for substation expansion planning," *International Review on Modelling and Simulations*, vol. 5, pp. 385-393, 2012.
- [35] E. Alishahi, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "A system dynamics approach for investigating impacts of incentive mechanisms on wind power investment," *Renewable Energy*, vol. 37, pp. 310-317, 2012.
- [36] Abdollahi, **M. Parsa Moghaddam**, M. Rashidinejad, and M. K. Sheikh-El-Eslami, "Investigation of economic and environmental-driven demand response measures incorporating UC," *IEEE Transactions on Smart Grid*, vol. 3, pp. 12-25, 2012.
- [37] K. Zare, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "Risk-based electricity procurement for large consumers," *IEEE Transactions on Power Systems*, vol. 26, pp. 1826-1835, 2011.
- [38] S. Yousefi, **M. Parsa Moghaddam**, and V. Johari Majd, "Agent-based modeling of day-ahead real time pricing in a pool-based electricity market," *Iranian Journal of Electrical and Electronic Engineering*, vol. 7, pp. 203-212, 2011.
- [39] S. Yousefi, **M. P. Moghaddam**, and V. J. Majd, "Optimal real time pricing in an agent-based retail market using a comprehensive demand response model," *Energy*, vol. 36, pp. 5716-5727, 2011.
- [40] M. Shafie-Khah, **M. Parsa Moghaddam**, and M. K. Sheikh-El-Eslami, "Unified solution of a non-convex SCUC problem using combination of modified Branch-and-Bound method with Quadratic Programming," *Energy Conversion and Management*, vol. 52, pp. 3425-3432, 2011.
- [41] M. Shafie-Khah, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "Price forecasting of day-ahead electricity markets using a hybrid forecast method," *Energy Conversion and Management*, vol. 52, pp. 2165-2169, 2011.
- [42] **M. P. Moghaddam**, A. Abdollahi, and M. Rashidinejad, "Flexible demand response programs modeling in competitive electricity markets," *Applied Energy*, vol. 88, pp. 3257-3269, 2011.
- [43] S. J. Kazempour and **M. P. Moghaddam**, "Risk-constrained self-scheduling of a fuel and emission constrained power producer using rolling window procedure," *International Journal of Electrical Power and Energy Systems*, vol. 33, pp. 359-368, 2011.
- [44] E. Alishahi, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "An investigation on the impacts of regulatory interventions on wind power expansion in generation planning," *Energy Policy*, vol. 39, pp. 4614-4623, 2011.
- [45] K. Zare, **M. P. Moghaddam**, and M. K. Sheikh El Eslami, "Electricity procurement for large consumers based on Information Gap Decision Theory," *Energy Policy*, vol. 38, pp. 234-242, 2010.
- [46] K. Zare, **M. P. Moghaddam**, and M. K. Sheikh El Eslami, "Demand bidding construction for a large consumer through a hybrid IGDT-probability methodology," *Energy*, vol. 35, pp. 2999-3007, 2010.
- [47] K. Zare, A. J. Conejo, M. Carrión, and **M. P. Moghaddam**, "Multi-market energy procurement for a large consumer using a risk-aversion procedure," *Electric Power Systems Research*, vol. 80, pp. 63-70, 2010.
- [48] E. Shayesteh, A. Yousefi, and **M. Parsa Moghaddam**, "A probabilistic risk-based approach for spinning reserve provision using day-ahead demand response program," *Energy*, vol. 35, pp. 1908-1915, 2010.
- [49] E. Shayesteh, **M. P. Moghaddam**, A. Yousefi, M. R. Haghifam, and M. K. Sheik-El-Eslami, "A demand side approach for congestion management in competitive environment," *European Transactions on Electrical Power*, vol. 20, pp. 470-490, 2010.
- [50] N. Mahmoudi-Kohan, **M. Parsa Moghaddam**, and M. K. Sheikh-El-Eslami, "An annual framework for clustering-based pricing for an electricity retailer," *Electric Power Systems Research*, vol. 80, pp. 1042-1048, 2010.
- [51] N. Mahmoudi-Kohan, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and E. Shayesteh, "A three-stage strategy for optimal price offering by a retailer based on clustering techniques," *International Journal of Electrical Power and Energy Systems*, vol. 32, pp. 1135-1142, 2010.
- [52] T. Barforoushi, **M. P. Moghaddam**, M. H. Javidi, and M. K. Sheikh-El-Eslami, "Evaluation of regulatory impacts on dynamic behavior of investments in electricity markets: A new hybrid DP/GAME framework," *IEEE Transactions on Power Systems*, vol. 25, pp. 1978-1986, 2010.
- [53] Bagheri, S. H. Hosseini, S. Jalilzadeh, A. Jalilvand, and **M. P. Moghaddam**, "Sub-transmission system expansion planning including distributed generation and considering the losses by genetic algorithm," *International Review of Electrical Engineering*, vol. 5, pp. 1655-1663, 2010.
- [54] P. T. Baboli and **M. P. Moghaddam**, "Allocation of network-driven load-management measures using multiattribute decision making," *IEEE Transactions on Power Delivery*, vol. 25, pp. 1839-1845, 2010.
- [55] H. A. Aalami, **M. P. Moghaddam**, and G. R. Yousefi, "Demand response modeling considering Interruptible/Curtailable loads and capacity market programs," *Applied Energy*, vol. 87, pp. 243-250, 2010.

- [56] H. A. Aalami, **M. P. Moghaddam**, and G. R. Yousefi, "Modeling and prioritizing demand response programs in power markets," *Electric Power Systems Research*, vol. 80, pp. 426-435, 2010.
- [57] M. Ramezani, M. R. Haghifam, C. Singh, H. Seifi, and **M. P. Moghaddam**, "Determination of capacity benefit margin in multiarea power systems using particle swarm optimization," *IEEE Transactions on Power Systems*, vol. 24, pp. 631-641, 2009.
- [58] S. J. Kazempour, **M. P. Moghaddam**, M. R. Haghifam, and G. R. Yousefi, "Risk-constrained dynamic self-scheduling of a pumped-storage plant in the energy and ancillary service markets," *Energy Conversion and Management*, vol. 50, pp. 1368-1375, 2009.
- [59] S. J. Kazempour, **M. P. Moghaddam**, M. R. Haghifam, and G. R. Yousefi, "Electric energy storage systems in a market-based economy: Comparison of emerging and traditional technologies," *Renewable Energy*, vol. 34, pp. 2630-2639, 2009.
- [60] Badri, S. Jadid, **M. P. Moghaddam**, and M. Rashidinejad, "Impact of generators' behaviors on Nash equilibrium considering transmission constraints," *European Transactions on Electrical Power*, vol. 19, pp. 765-777, 2009.
- [61] **M. Parsa Moghaddam**, H. Abdi, and M. H. Javidi, "Probabilistic OPF approach for transmission expansion planning in restructured power systems," *Iranian Journal of Electrical and Computer Engineering*, vol. 7, pp. 23-28, 2008.
- [62] A. Badri, S. Jadid, M. Rashidinejad, and **M. P. Moghaddam**, "Optimal bidding strategies in oligopoly markets considering bilateral contracts and transmission constraints," *Electric Power Systems Research*, vol. 78, pp. 1089-1098, 2008.
- [63] R. Hatami and **M. P. Moghaddam**, "Three-phase fast decoupled load flow for unbalanced distribution systems," *Iranian Journal of Electrical and Computer Engineering*, vol. 6, pp. 31-35, 2007.
- [64] **M. Parsa Moghaddam**, M. Raoofat, and M. R. Haghifam, "Transmission loss allocation in a multilateral open access power system," *Iranian Journal of Science and Technology, Transaction B: Engineering*, vol. 30, pp. 681-689, 2006.
- [65] **M. P. Moghaddam**, M. K. Sheik-El-Eslami, and S. Jadid, "Power market long-term stability: A hybrid MADM/GA comprehensive framework," *IEEE Transactions on Power Systems*, vol. 20, pp. 2107-2116, 2005.
- [66] **M. P. Moghaddam**, M. Raoofat, and M. R. Haghifam, "Optimal power transaction matrix rescheduling under multilateral open access environment," *International Journal of Electrical Power and Energy System*, vol. 26, pp. 523-529, 2004.
- [67] M. Setayesh Nazar, **M. Parsa Moghaddam**, M. R. Haghifam, and M. H. Javidi, "Multiobjective coordination of demand side management procedures for corrective actions," *Amirkabir (Journal of Science and Technology)*, vol. 12, pp. 408-423, 2001.
- [68] Seifi, H. Seifi, M. R. Ansari, and **M. Parsa Moghaddam**, "Intelligent power plant simulator for educational purposes," *Amirkabir (Journal of Science and Technology)*, vol. 12, pp. 328-340, 2001.

✓ Conference Papers:

- [1] **M. P. Moghaddam**, M. Moradipoor, and M. R. Haghifam, "Integrated planning of distribution system and gridable parking lots," in *Asia-Pacific Power and Energy Engineering Conference, APPEEC, 2016*.
- [2] **M. P. Moghaddam**, S. Bahramara, M. Y. Damavandi, and M. R. Haghifam, "Distribution company and microgrids behaviour in energy and reserve equilibrium," in *Asia-Pacific Power and Energy Engineering Conference, APPEEC, 2016*.
- [3] Z. Hashemi, A. Ramezani, and **M. P. Moghaddam**, "Energy hub management by using decentralized robust model predictive control," in *2016 4th International Conference on Control, Instrumentation, and Automation, ICCIA 2016, 2016*, pp. 105-110.
- [4] S. Fini, S. Bahramara, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "Modelling multi-resource regulatory incentives in expansion planning problem," in *Proceedings of the 2015 IEEE Innovative Smart Grid Technologies - Asia, ISGT ASIA 2015, 2016*.
- [5] M. Y. Damavandi, S. Bahramara, **M. P. Moghaddam**, M. R. Haghifam, M. Shafie-Khah, and J. P. S. Catalao, "Bi-level approach for modeling multi-energy players' behavior in a multi-energy system," in *2015 IEEE Eindhoven PowerTech, PowerTech 2015, 2015*.
- [6] P. T. Baboli, S. Bahramara, **M. P. Moghaddam**, and M. R. Haghifam, "A mixed-integer linear model for optimal

operation of hybrid AC-DC microgrid considering Renewable Energy Resources and PHEVs," in *2015 IEEE Eindhoven PowerTech, PowerTech 2015*, 2015.

- [7] E. Heydarian-Forushani, **M. P. Moghaddam**, M. K. Sheikh-El-eslami, M. Shafie-Khah, and J. P. S. Catalão, "Investigating the effects of flexible load in the grid integration of wind power," in *Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference*, 2014.
- [8] P. T. Baboli, **M. P. Moghaddam**, M. R. Haghifam, M. Shafie-Khah, and J. P. S. Catalão, "Serving flexible reliability in hybrid AC-DC microgrid using demand response and renewable energy resources," in *Proceedings - 2014 Power Systems Computation Conference, PSCC 2014*, 2014.
- [9] M. Shafie-Khah, J. P. S. Catalao, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "A new model to improve the behavior of PIEVs aggregator considering the customers' motivation," in *2013 IEEE Grenoble Conference PowerTech, POWERTECH 2013*, 2013.
- [10] E. Heydarian-Forushani, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "A comprehensive load reduction demand response program for spinning reserve provision," in *2013 21st Iranian Conference on Electrical Engineering, ICEE 2013*, 2013.
- [11] M. H. Amini, **M. P. Moghaddam**, and E. Heydarian Forushani, "Forecasting the PEV owner reaction to the electricity price based on the customer acceptance index," in *Smart Grid Conference 2013, SGC 2013*, 2013, pp. 264-267.
- [12] M. H. Amini and **M. P. Moghaddam**, "Probabilistic modelling of electric vehicles' parking lots charging demand," in *2013 21st Iranian Conference on Electrical Engineering, ICEE 2013*, 2013.
- [13] M. Moradijooz and **M. P. Moghaddam**, "Optimum allocation of parking lots in distribution systems for loss reduction," in *IEEE Power and Energy Society General Meeting*, 2012.
- [14] M. Moradijooz, A. Ghazanfarimeymand, **M. P. Moghaddam**, and M. R. Haghifam, "Optimum placement of distributed generation and parking lots for loss reduction in distribution networks," in *2012 Proceedings of 17th Conference on Electrical Power Distribution, EPDC 2012*, 2012.
- [15] H. R. Mohajeri, **M. P. Moghaddam**, M. Shahparasti, and M. Mohamadian, "Development a new algorithm for maximum power point tracking of partially shaded photovoltaic arrays," in *ICEE 2012 - 20th Iranian Conference on Electrical Engineering*, 2012, pp. 489-494.
- [16] H. R. Mohajeri, **M. P. Moghaddam**, M. Shahparasti, and M. Mohamadian, "Linear circuit-oriented model of photovoltaic array using optimization algorithm," in *ICEE 2012 - 20th Iranian Conference on Electrical Engineering*, 2012, pp. 479-484.
- [17] E. Heydarian Forushani, H. R. Arasteh, and **M. Parsa Moghaddam**, "Optimum retailer operation considering parking lots participation in electricity market," in *2012 2nd Iranian Conference on Smart Grids, ICSG 2012*, 2012.
- [18] P. T. Baboli, M. Eghbal, **M. P. Moghaddam**, and H. Aalami, "Customer behavior based demand response model," in *IEEE Power and Energy Society General Meeting*, 2012.
- [19] H. R. Arasteh, **M. Parsa Moghaddam**, and M. K. Sheikh-el-Eslami, "Bidding strategy in demand response exchange market," in *2012 2nd Iranian Conference on Smart Grids, ICSG 2012*, 2012.
- [20] H. R. Arasteh, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "Bidding strategy in demand response exchange market," in *2012 Proceedings of 17th Conference on Electrical Power Distribution, EPDC 2012*, 2012.
- [21] M. H. Amini, B. Nabi, **M. Parsa Moghaddam**, and S. A. Mortazavi, "Evaluating the effect of demand response programs and fuel cost on PHEV owners behavior, a mathematical approach," in *2012 2nd Iranian Conference on Smart Grids, ICSG 2012*, 2012.
- [22] E. Alishahi, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "A system dynamics approach for evaluating the optimum value of reliability-based incentive mechanism for wind generation in GEP," in *IEEE Power and Energy Society General Meeting*, 2012.
- [23] M. Rahmani-Andebili, A. Abdollahi, and **M. P. Moghaddam**, "An investigation of implementing Emergency Demand Response Program (EDRP) in unit commitment problem," in *IEEE Power and Energy Society General Meeting*, 2011.
- [24] N. Mahmoudi-Kohan, M. Eghbal, and **M. P. Moghaddam**, "Customer recognition-based demand response implementation by an electricity retailer," in *2011 21st Australasian Universities Power Engineering Conference, AUPEC 2011*, 2011.
- [25] T. Ghanbarzadeh, S. Goleijani, and **M. P. Moghaddam**, "Reliability constrained unit commitment with electric vehicle to grid using hybrid particle swarm optimization and ant colony optimization," in *IEEE Power and Energy Society General Meeting*, 2011.

- [26] T. Ghanbarzadeh, P. T. Baboli, M. Rostami, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "Wind farm power management by high penetration of PHEV," in *IEEE Power and Energy Society General Meeting*, 2011.
- [27] P. T. Baboli, **M. P. Moghaddam**, and M. Eghbal, "Present status and future trends in enabling demand response programs," in *IEEE Power and Energy Society General Meeting*, 2011.
- [28] M. Peikherfeh, M. Abapour, **M. Parsa Moghaddam**, and A. Namdari, "Optimal allocation of FACTS devices for provision of voltage control ancillary services," in *2010 7th International Conference on the European Energy Market, EEM 2010*, 2010.
- [29] H. Moradi, I. G. Moghaddam, **M. P. Moghaddam**, and M. R. Haghifam, "Opportunities to improve energy efficiency and reduce greenhouse gas emissions for a cogeneration plant," in *2010 IEEE International Energy Conference and Exhibition, EnergyCon 2010*, 2010, pp. 785-790.
- [30] **M. P. Moghaddam**, P. T. Baboli, E. Alishahi, and F. Lotfifard, "Flexible load following the wind power generation," in *2010 IEEE International Energy Conference and Exhibition, EnergyCon 2010*, 2010, pp. 802-807.
- [31] S. M. Bidoki, N. Mahmoudi-Kohan, M. H. Sadreddini, M. Z. Jahromi, and **M. P. Moghaddam**, "Evaluating different clustering techniques for electricity customer classification," in *2010 IEEE PES Transmission and Distribution Conference and Exposition: Smart Solutions for a Changing World*, 2010.
- [32] E. Shayesteh, A. Yousefi, **M. Parsa Moghaddam**, and M. K. Sheikh-El-Eslami, "ATC enhancement using emergency demand response program," in *2009 IEEE/PES Power Systems Conference and Exposition, PSCE 2009*, 2009.
- [33] E. Shayesteh, **M. Parsa Moghaddam**, M. R. Haghifam, and M. K. Sheikh-El-Eslami, "Security-based congestion management by means of demand response programs," in *2009 IEEE Bucharest PowerTech: Innovative Ideas Toward the Electrical Grid of the Future*, 2009.
- [34] E. Shayesteh, M. Eliasi, N. Mahmoudi-Kohan, and **M. Parsa Moghaddam**, "Security-based demand response allocation," in *2009 IEEE Power and Energy Society General Meeting, PES '09*, 2009.
- [35] N. Mahmoudi-Kohan, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and S. M. Bidaki, "Improving WFA K-means technique for demand response programs applications," in *2009 IEEE Power and Energy Society General Meeting, PES '09*, 2009.
- [36] N. Mahmoudi-Kohan, **M. P. Moghaddam**, and S. M. Bidaki, "Evaluating performance of WFA K-means and modified follow the leader methods for clustering load curves," in *2009 IEEE/PES Power Systems Conference and Exposition, PSCE 2009*, 2009.
- [37] S. J. Kazempour, **M. P. Moghaddam**, M. R. Haghifam, and G. R. Yousefi, "Dynamic self-scheduling of a fuel and emission constrained power producer under uncertainties," in *2009 IEEE/PES Power Systems Conference and Exposition, PSCE 2009*, 2009.
- [38] S. J. Kazempour and **M. P. Moghaddam**, "Economic viability of nas battery plant in a competitive electricity market," in *2009 International Conference on Clean Electrical Power, ICCEP 2009*, 2009, pp. 453-459.
- [39] S. J. Kazempour, M. Hosseinpour, **M. P. Moghaddam**, and G. R. Yousefi, "Coupling fuel-constrained power plant and NaS battery system for profit increment in a competitive electricity market," in *2009 IEEE/PES Power Systems Conference and Exposition, PSCE 2009*, 2009.
- [40] S. J. Kazempour, M. Hosseinpour, and **M. P. Moghaddam**, "Self-scheduling of a joint hydro and pumped-storage plants in energy, spinning reserve and regulation markets," in *2009 IEEE Power and Energy Society General Meeting, PES '09*, 2009.
- [41] Yousefi, E. Shayesteh, K. Zare, S. Jalal Kazempour, **M. P. Moghaddam**, and M. R. Haghifam, "Risk Based Spinning Reserve Allocation Considering Emergency Demand Response Program," in *Proceedings of the Universities Power Engineering Conference*, 2008.
- [42] Yousefi, E. Shayesteh, F. Daneshvar, and **M. P. Moghaddam**, "A risk-based approach for provision of spinning reserve by means of emergency demand response program," in *PECon 2008 - 2008 IEEE 2nd International Power and Energy Conference*, 2008, pp. 1011-1015.
- [43] Yousefi, H. Aalami, S. Ebrahim, and **M. P. Moghaddam**, "Enhancement of spinning reserve capacity by means of optimal utilization of edrp program," in *Proceedings of the 4th IASTED Asian Conference on Power and Energy Systems, AsiaPES 2008*, 2008, pp. 160-166.
- [44] A. Yaghoti, **M. P. Moghaddam**, M. R. Haghifam, and V. J. Majd, "A new formulation ipca based method for branch-current estimation in distribution networks," in *IET Seminar Digest*, 2008.
- [45] E. Shayesteh, A. Yousefi, **M. P. Moghaddam**, and G. R. Yousefi, "An economic comparison between incorporation of FACTS devices and Demand Response programs for ATC enhancement," in *2008 IEEE Electrical Power and Energy Conference - Energy Innovation*, 2008.

- [46] E. Shayesteh, A. Yousefi, F. Daneshvar, and **M. P. Moghaddam**, "An approach for improving spinning reserve capacity by means of optimal utilization of DR program," in *PECon 2008 - 2008 IEEE 2nd International Power and Energy Conference*, 2008, pp. 153-158.
- [47] E. Shayesteh, **M. P. Moghaddam**, S. Taherynejhad, and M. K. Sheikh-El-Eslami, "Congestion Management using Demand Response programs in power market," in *IEEE Power and Energy Society 2008 General Meeting: Conversion and Delivery of Electrical Energy in the 21st Century, PES*, 2008.
- [48] **M. P. Moghaddam**, E. T. Ghadikolayi, and M. Mohamadian, "A new method for pricing of wind power in short-term power markets," in *16th Power Systems Computation Conference, PSCC 2008*, 2008.
- [49] N. M. Kohan, **M. P. Moghaddam**, S. Mohammad Bidaki, and G. R. Yousefi, "Comparison of Modified K-Means and Hierarchical Algorithms in Customers Load Curves Clustering for Designing Suitable Tariffs in Electricity Market," in *Proceedings of the Universities Power Engineering Conference*, 2008.
- [50] S. J. Kazempour, A. Yousefi, K. Zare, **M. P. Moghaddam**, M. R. Haghifam, and G. R. Y. Tarbiat, "A MIP-Based optimal operation scheduling of pumped-storage plant in the energy and regulation markets," in *Proceedings of the Universities Power Engineering Conference*, 2008.
- [51] S. J. Kazempour, **M. P. Moghaddam**, and G. R. Yousefi, "Self-scheduling of a price-taker hydro producer in day-ahead energy and ancillary service markets," in *2008 IEEE Electrical Power and Energy Conference - Energy Innovation*, 2008.
- [52] H. Aalami, G. R. Yousefi, and **M. Parsa Moghadam**, "A MADM-based support system for DR programs," in *Proceedings of the Universities Power Engineering Conference*, 2008.
- [53] H. Aalami, G. R. Yousefi, and **M. Parsa Moghadam**, "Demand response model considering EDRP and TOU programs," in *Transmission and Distribution Exposition Conference: 2008 IEEE PES Powering Toward the Future, PIMS 2008*, 2008.
- [54] K. Zare, **M. P. Moghaddam**, and M. K. S. Al Eslami, "Large consumer's decision making to cost reduction in real time power market," in *Proceedings of the Universities Power Engineering Conference*, 2007, pp. 89-92.
- [55] S. J. Kazempour and **M. P. Moghaddam**, "Static security enhancement by means of optimal utilization of NAS battery systems," in *2007 IEEE Lausanne POWERTECH, Proceedings*, 2007, pp. 1791-1796.
- [56] Badri, S. Jadid, and **M. P. Moghaddam**, "Study of GenCos' Cournot behaviors considering market auction mechanism," in *2007 Australasian Universities Power Engineering Conference, AUPEC*, 2007.
- [57] Badri, S. Jadid, and **M. P. Moghaddam**, "Impact of generators' different bidding strategies on System Nash Equilibrium Point," in *8th International Power Engineering Conference, IPEC 2007*, 2007, pp. 1-5.
- [58] Badri, S. Jadid, and **M. P. Moghaddam**, "Investigation of GenCos' optimal bidding strategies in oligopolistic power markets," in *2007 Australasian Universities Power Engineering Conference, AUPEC*, 2007.
- [59] M. K. Sheik-El-Eslami, **M. P. Moghaddam**, and S. Jadid, "Expansion planning in private generation companies: A practical method," in *2006 IEEE Power Engineering Society General Meeting, PES*, 2006.
- [60] M. Ramezani, H. Falaghi, **M. P. Moghaddam**, and M. R. Haghifam, "Genetic based algorithm for optimal placement of distribution transformers," in *2006 IEEE Power Engineering Society General Meeting, PES*, 2006.
- [61] **M. Parsa Moghaddam**, H. Abdi, and M. H. Javidi, "Transmission expansion planning in competitive electricity markets using AC OPF," in *2006 IEEE PES Power Systems Conference and Exposition, PSCE 2006 - Proceedings*, 2006, pp. 1507-1512.
- [62] **M. P. Moghaddam**, M. Sheikh-El-Eslami, and S. Jadid, "Power market long-term stability: A hybrid MADM/GA comprehensive framework," in *2006 IEEE Power Engineering Society General Meeting, PES*, 2006.
- [63] A. Yaghoti, **M. Parsa**, and V. J. Majd, "Electrical distribution networks state estimation," in *IEE Conference Publication*, 2005, pp. 309-313.
- [64] **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and S. Jadid, "A price guideline for generation expansion planning in competitive electricity markets," in *2005 IEEE Power Engineering Society General Meeting*, 2005, pp. 197-201.
- [65] **M. P. Moghaddam**, M. K. Sheikh-El-Eslam, and S. Jadid, "A MADM framework for generation expansion planning in small electricity firms," in *2005 IEEE Power Engineering Society General Meeting*, 2005, pp. 185-189.
- [66] **M. Parsa Moghaddam**, M. Raoofat, and M. R. Haghifam, "Optimal power flow with fuzzy constraints under open access environments," in *Proceedings of the IASTED Multi-Conference- Power and Energy Systems*, 2003, pp. 98-103.

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- [1] S. Bahramara, " Operation of Flexible Active Distribution Networks in Competitive Environment in The Presence of Independent Microgrids", 2016.
- [2] M. Yazdani, " Modeling of Interactive Environment of Multi Carrier Energy Systems", 2015.
- [3] A. Ghaderi, "Modeling of Long-term Demand Side Management Programs in Generation Expansion Planning", 2015.
- [4] A-R.Sheikhi, "Distributed Energy Resource Planning Considering The Impacts of Regulatory Policies", 2014.
- [5] P. Teimourzadeh, " Demand-Side Resources Assignment for Achieving Flexible Reliability in Power systems", 2014.
- [6] A. Abdollahi, "Dynamic Demand Response Scheduling from The View Point of Independent System Operator (ISO)", 2012.
- [7] M.Shafiekhah, "Monitoring of Medium-Term Behavior of Electricity Market Considering The Impact of Regulations Changes", 2012.
- [8] E. Alishahi, "Generation Expansion Planning in the Competitive Electricity Market Considering Wind Resources from the View Point of Investor", 2011.
- [9] S.Yousefi, " Load Modeling in Smart Distribution Networks Based on Multi Agent System Theory", 2011.
- [10] H .Alami, "Demend Response Modeling Based on Price Elasticity of Demand", 2010.
- [11] K. Zare, "Determination of Optimum Strategy of Large Consumers Presence in Electricity Markets Using Information Gap Decision Theory", 2009.
- [12] A. Yaghooti, "Load Estimation of Distribution Network with Limited Real-time Data by Data Mining", 2008.
- [13] T. Barforoushi, "Modeling Investments Dynamic in Generation Expansion Planning in Restructured Power Systems", 2008.
- [14] H. Abdi, " Transmission Expansion Planing in Competitive Markets", 2006.
- [15] M-K. Sheikh-al-Eslami, "Generation Expansion Planning in Competitive Electricity Markets Based on Multi Attribute Decision Making", 2005
- [16] M. Raofat, " Security Constraint OPF in Open Access Power Systems", 2003.
- [17] M. Setayeshnazar, " Optimal Power Flow Considering Contingency Constraints and Demand Side Managment", 2000.
- [18] P. Beetaab, " Optimum Generation Scheduling with Determination of Optimum Load", 2000.
- [19] M.R. Haghifam, " Real-time Reliability Assessment in Power Systems", 1995.

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Completed: 61