RESUME

Asghar Akbari Foroud

Professor
Electrical and Computer Engineering Faculty
Semnan University
Semnan, Iran

Asghar Akbari Foroud, Professor at the Semnan University, Semnan, Iran, received his M.S. from the Teahran University, Tehran, Iran and his Ph.D. from the Tarbiat Modares University, Iran. He has published over 85 papers and has been the project manager or principal investigator of many research projects financed by power industry. He has supervised 13 Ph.D and 57 M.S. Students.

Personal Information
Birth: Jan. 1971, Hamadan, Iran
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http://scholar.google.com/citations?user=BZsfCJoAAAAJ&hl=en&cstart=0&pagesize=20

Field of Specialty:

Power System Dynamics, Operation and Control, Power Market, Power System Planning, Power Quality, Power System Distribution

Education:

2001-2006 **Ph.D.**, Electrical Engineering, Tarbiat Modares University
Thesis Topic: Development of New Control Strategies for Voltage Stability in Multi-machine Power Systems

1994-1997 **M.Sc.**, Electrical Engineering, Tarbiat Modares University
Thesis Topic: A New Method for Contingency Ranking for Voltage Stability Analysis of Power Systems

1989-1993 **B.Sc.**, Electrical Engineering, Tehran University

Professional Activities:

Semnan University- Electrical Engineering Group

- ✓ Faculty member since 1997
- ✓ Assistant Professor since 2006
- ✓ Associate Professor since 2012
- ✓ Professor since 2016
- ✓ Teaching of several courses at graduate and undergraduate levels, including Power System Dynamic & Control, Power Market, Optimization, Electrical

Machines, Linear Control Systems, Power System Analysis and Power System Protection. (1997-2001 and (2005 up to now)
- ✓ Responsible for several research projects.

Semnan Electricity Distribution Company
- ✓ Member of Research Committee (since 2007)
- ✓ Senior Advisor on issues of power (since 2009)

Iranian Power System Engineering Research Center (IPSERC) (since 2004)
http://www.modares.ac.ir/en/reu/ctr/IPSERC/ppl/fcl
- ✓ Project Manager or Principal Investigator for several industrial projects

Graduate student supervision:
Ph.D. Completed: 14.
M.Sc. Completed: 67.

Projects:

Industry funded research projects: Project manager for:

1. Considering and Improvement of Semnan Transmission Network Adequacy and Transfer Capability (for Semnan Regional Electric Company), 2008.
2. Comprehensive Consideration of DGs in Semnan Distribution Network. (for Semnan Electric Distribution Company), 2009.
3. Power Quality Evaluation of Semnan Electric Company. (for Semnan Regional Electric Company), 2010,
4. Power flow control in Khorasan Transmission Network (for Khorasan Regional Electric Company), 2012.
5. Comprehensive Study of Semnan Medium Voltage Distribution Network (for Semnan Electric Distribution Company), 2013.
6. Comprehensive Energy Planning for Industrial Cities of Semnan Province (for Semnan Province Industrial Cities Management Company), 2013.
7. Dynamic Study of Yazd Transmission Network (for Yazd Regional Electric Company), 2014.
8. A new method for power quality evaluation in distribution network (for Semnan Electric Distribution Company), 2015.
9. Comprehensive Study of Shahrod Medium Voltage Distribution Network (for Semnan Electric Distribution Company), 2016.
10. Design and modeling of day ahead energy market with incorporating virtual traders in Iran's wholesale market and energy exchange (for Iran Grid Management Company (IGMC), 2017.
11. Allocation of distributed generations (DGs) for the west of Semnan province (for Semnan Electric Distribution Company), 2018-2019.
12. Investigating and analyzing the status of harmonics in Ferosilis plant of Iran (for Ferosilis plant of Iran). 2020.

13. Investigation of harmonic flow from transmission network to ferrosilicon plant network and corrective solutions (for Ferosilis plant of Iran). 2021.
14. Consideration of Voltage Surges in Semnan Low-Voltage Distribution Network (for Semnan Electric Distribution Company), 2019-2021.
15. Investigating the cause of GE relays' fail in Hormozgan province substations (for Hormozgan Regional Electric company), 2021-2022.
16. Preparing a road map for the use of daylight lighting systems and lighting control systems in order to save energy and make it possible to produce its advanced equipment (for National Elite Foundation), 2022.
17. Designing and building a centralized energy management system with a demand side management approach and increasing the use of daylight (for National Elite Foundation), 2023.
18. Compilation of instructions for installing lightning arresters in the secondary of distribution transformers (for Hormozgan Electric Distribution Company), 2022-2023
19. Investigating the causes of cable termination failures and building an online monitoring device for 20 kV feeder cable terminations (for Hormozgan Regional Electric company), 2023-2024.
20. Comprehensive studies of reactive power in the existing network of Semnan regional electric company in order to improve the voltage profile, increase stability, modify the power factor and reduce network losses and provide executive solutions and prioritize them for the next 5 years, considering different operational conditions and inter-area power transfer and use of technical and economic characteristics; (for Semnan Regional Electric company), 2023-2024.
21. Design and manufacuring the power suplly for GE F650 relay. (for Hormozgan Regional Electric company), 2024.
22. Feasibility study and preparation of a connection plan for the Pak Saman Sun solar power plant in the Semnan Special Economic Zone to the medium-voltage grid of Semnan Province; for Pak Saman Sun Company, 2023.
23. Conducting studies and proposing a grid connection plan for the 40 MW Shahrud Cement Solar Power Plant; for Shahrud Cement Company, 2024.
24. Grid connection plan for the 3 MW photovoltaic power plant of Ayeneh Sama Mehr Company to the medium-voltage grid of Semnan Province Power Distribution Company; for Ayeneh Sma Mehr, 2025.
25. Conducting studies and proposing a grid connection plan for the 10 MW Shahrud Cement Company power plant, divided into two sections:3 MW to the factory's internal network (6.3 kV voltage) and

7 MW to the 20 kV Bastam grid; for Shahrud Cement Company, 2025.

26. Feasibility study and proposal of solutions for supplying electrical power to the Biarjmand Cement Plant; for for Biarjmand Cement Company, 2025.

2002-2009 Iranian Power System Engineering Research Center (IPSERC): Project Manager or principal Investigator for:
http://www.modares.ac.ir/en/reu/ctr/IPSERC/res/prj/prj2

27. Extensive long- term planning studies for Fars electric utility (for 2009-2013).
28. Power transfer enhancement strategies for Khorasan power grid. (http://www.modares.ac.ir/en/reu/ctr/IPSERC/res/prj/prj1)
29. Reliability evaluation of IRAN transmission network (for TAVANIR Company)
30. Extensive long-term planning studies for Yazd electric utility for 2014 and 2017
31. Extensive long-term planning studies for Fars electric utility (2004-2009).
32. Extensive long-term planning studies for Yazd electric utility (2004-2009).
33. Long-term transmission planning of Iranian power grid for 2009 and 2019 (for TAVANIR Company).

1998-2000 Semnan University: Project manager for:

34. Reliability evaluation of low voltage distribution systems.
35. Voltage stability considerations in composite power system reliability evaluation.

Patents:

1. Turbo-expander for cooling of air entering the gas turbine.

Book & Book Chapter:

1. Operation Management of Microgrid Clusters
M Moradi, A Akbari Foroud
Microgrids: Advances in Operation, Control, and Protection,Springer, 17-59 2021

2. Fault Current Limiters: Concepts and Applications
MR Barzegar-Bafrooei, J Dehghani-Ashkezari, AA Foroud, HH Alhelou
Springer, 2021

3. Wholesale Market of Electrical Energy and Ancillary Services
A Akbari Foroud, A. Khandani, Semnan University, 2023

4. Introduction and Use Cases of P2P Trading, 23-45
Bahman Taheri, Farkhondeh Jabari, Asghar Akbari Foroud, and Reza Keypour
Springer. 2023

5. Hydrogenation from Renewable Energy Sources for Developing a Carbon-Free Society: Methods, Real Cases, and Standards, 105-140
Mehdi Talaie, Farkhondeh Jabari, and Asghar Akbari Foroud
Springer. 2023

Publications:

Journal papers:

1- H. Seifi and **A. Akbari Foroud**, 'Contingency Ranking for Voltage Stability Analysis Using Artificial Neural Networks' Amirkabir Journal (Scientific & Research), No. 38, pp.175-186 (in Farsi), 1998.	1998
2-A new approach for substation expansion planning MS Sepasian, H Seifi**, A Akbari Foroud**, SH Hosseini, EM Kabir Power Systems, IEEE Transactions on 21 (2), 997-1004	2006
3-Advanced HSVC Tuning in Multi-Machine Power Systems for Loadability Improvements **A Akbari Foroud**, H Seifi, AK Sedigh Electric Power Components and Systems 34 (6), 689-706	2006
4-Multi-voltage approach to long-term network expansion planning H Seifi, MS Sepasian, H Haghighat**, A Akbari Foroud**, GR Yousefi, S Rae IET Generation, Transmission & Distribution 1 (5), 826-835	2007
5-A multiyear security constrained hybrid generation-transmission expansion planning algorithm including fuel supply costs MS Sepasian, H Seifi, **A Akbari Foroud**, AR Hatami Power Systems, IEEE Transactions on 24 (3), 1609-1618	2009
6-TCSC Robust Controller by Nonlinear Quantitative Feedback Theory **A Akbari Foroud** The Modares Journal of Electrical Engineering 8 (1), 93-103	2009
7-A multi-objective framework for dynamic transmission expansion planning in competitive electricity market **A Akbari Foroud**, AA Abdoos, R Keypour, M Amirahmadi International Journal of Electrical Power & Energy Systems 32 (8), 861-872	2010
8-Distribution Companies Energy Acquisition Model with Distributed Generations and Interruptible Loads with Considering Uncertainties M Amirahmadi, **A Akbari Foroud** The Modares Journal of Electrical Engineering 10 (1), 39-56	2010
9-Induction Motor Robust Control: a Quantitative Feedback Theory Approach.	2010

F Dara, **A Akbari Foroud** International Review of Automatic Control 3 (6)	
10-Optimal bidding strategy for all market players in a wholesale power market considering demand response programs **A Akbari Foroud**, M Amirahmadi, M Bahmanzadeh, AA Abdoos European Transactions on Electrical Power 21 (1), 293-311	2011
11-Analyzing capacity withholding in oligopoly electricity markets considering forward contracts and demand elasticity S Salarkheili, **A Akbari Foroud**, R Keypour Iranian Journal of Electrical & Electronic Engineering 7 (4)	2011
12-Excitation robust control by nonlinear QFT **A Akbari Foroud**, H Seifi European Transactions on Electrical Power 21 (1), 1088-1109	2011
13-A Heuristic Algorithm for Ranking of Transmission and Subtransmission Expansion Plans **A Akbari Foroud**, H Seifi, MR Golsaz Shirazi, K Asiaei The Modares Journal of Electrical Engineering 10 (2), 83-99	2011
14-Case study: simulation and optimization of photovoltaic-wind-battery hybrid energy system in Taleghan-Iran using homer software A Shiroudi, R Rashidi, GB Gharehpetian, SA Mousavifar, **A Akbari Foroud** Journal of Renewable and Sustainable Energy 4 (5), 053111	2012
15-Strategic Bidding in a Pool-Based Electricity Market under Load Forecast Uncertainty S Gorgizadeh, **A Akbari Foroud**, M Amirahmadi Iranian Journal of Electrical & Electronic Engineering 8 (2), 164-176	2012
16-A New Framework for Congestion Management with Exact Modeling of Impacting Factors M Heydaripour**, A Akbari Foroud** Iranian Journal of Electrical & Electronic Engineering 8 (4), 329	2012
17-Modification of DC Optimal Power Flow, Based on Nodal Approximation of Transmission Losses MR Baghayipour, **A Akbari Foroud** Iranian Journal of Electrical & Electronic Engineering 8 (1)	2012
18-A Novel Scheme for Dynamic Network Expansion Planning in Deregulated Power System. M AmirAhmadi, **A Akbari Foroud**, AA Abdoos International Review of Electrical Engineering 7 (2)	2012
19-Improvement of DC Optimal Power Flow Problem Based on Nodal Approximation of Transmission Losses	2012

M Baghayipour, **A Akbari Foroud** Iranian Journal of Electrical and Electronic Engineering 8 (1), 76-90	
20-Stochastic multi-objective programming for simultaneous clearing of energy and spinning reserve markets considering reliability preferences of customers M Amirahmadi**, A Akbari Foroud** International Journal of Electrical Power & Energy Systems 53, 691-703	2013
21-Optimal strategy planning for a retailer considering medium and short-term decisions M Nazari, A **Akbari** Foroud International journal of Electrical power & Energy systems 45 (1), 107-116	2013
22-A stochastic framework for reactive power procurement market, based on nodal price model H Ahmadi, **A Akbari Foroud** International Journal of Electrical Power & Energy Systems 49, 104-113	2013
23-A novel method for maintenance scheduling of generating units considering the demand side SH Elyas, **A Akbari Foroud**, H Chitsaz International Journal of Electrical Power & Energy Systems 51, 201-212	2013
24-A new market clearing mechanism, based on comprehensive welfare allocation, considering participants' optimality, efficiency, and extent of transmission use M Baghayipour, **A Akbari Foroud** International Transactions on Electrical Energy Systems 23 (8), 1335-1364	2013
25-Market power assessment in electricity markets: supply function equilibrium-based model S Salarkheili, **A Akbari Foroud** International Transactions on Electrical Energy Systems 23 (4), 553-569	2013
26-Locational Prices in Capacity Subscription Market Considering Transmission Limitations SB Sarookolaee, **A Akbari Foroud** Iranian Journal of Electrical & Electronic Engineering 9 (2)	2013
27-Accurate Fault Classification of Transmission Line Using Wavelet Transform and Probabilistic Neural Network M Mollanezhad Heydar-Abadi, **A Akbari Foroud** Iranian Journal of Electrical and Electronic Engineering 9 (3), 177-188	2013
28-Discrimination of Power Quality Distorted Signals Based on Time-frequency Analysis and Probabilistic Neural Network M Hajian, **A Akbari Foroud**, AA Abdoos International Journal of Engineering-Transactions C: Aspects 27 (6), 881	2013

29-New automated power quality recognition system for online/offline monitoring M Hajian**, A Akbari Foroud**, AA Abdoos Neurocomputing 128, 389-406	2014
30-A new hybrid pattern recognition scheme for automatic discrimination of power quality disturbances M Hajian**, A Akbari Foroud** Measurement 51, 265-280	2014
31-A comprehensive fair nodal pricing scheme, considering participants' efficiencies and their rational shares of total cost of transmission losses M Baghayipour, **A Akbari Foroud**, A Soofiabadi International Journal of Electrical Power & Energy Systems 63, 30-43	2014
32-Optimal Spinning Reserve Requirement Determination Considering Reliability Preferences of Customers M Amirahmadi, **A Akbari Foroud** Arabian Journal for Science and Engineering 39 (6), 4945-4962	2014
33-Joint Energy and Reactive Power Market Considering Coupled Active and Reactive Reserve Market Ensuring System Security H Ahmadi, **A Akbari Foroud** Arabian Journal for Science and Engineering 39 (6), 4789-4804	2014
34-Nodal Market Power Detection under Locational Marginal Pricing A Soofiabadi, **A Akbari Foroud** Iranian Journal of Electrical & Electronic Engineering 10 (1), 45	2014
35-Power transformer protection scheme based on MRA-SSVM M Hajian, **A Akbari Foroud**, AA Abdoos Journal of Intelligent and Fuzzy Systems 27 (4), 1659-1669	2014
36- A New Approach to Locational Pricing and Settlement of Day-Ahead Spinning Reserve Market M Amirahmadi, **A Akbari Foroud** European Transactions on Electrical Power, (DOI: 10.1002/etep.2078)	2015
37- Recognition and Assessment of Different Factors which Affect Ficker in Wind Turbines Milad fooladi, **A Akbari Foroud** IET, Renewable Power Generation, doi: 10.1049/iet-rpg.2014.0419	2015
38- Improvement of the simultaneous active and reactive power markets pricing and structure Hamed Ahmadi, **A Akbari Foroud** IET, Generation, Transmission & Distribution, doi: 10.1049/iet-gtd.2015.0261	2015

39- Design of Joint Active and Reactive Power Reserve Market: A Multi-objective Approach Using NSGA II Hamed Ahmadi, **A Akbari Foroud** Accepted for publication in IET, Generation, Transmission & Distribution	2015
40- Cost-Effective Optimal Allocation and Sizing of Active Power Filters Using a New Fuzzy-MABICA Method Amir Moradi Far, **A Akbari Foroud** Accepted for publication in Taylor & Francis IETE Journal of Research.	2015
41- Modifying Nodal Pricing Method Considering Market Participants Optimality and Reliability Alireza Soofiabadi, **A Akbari Foroud** Iranian Journal of Electrical & Electronic Engineering, 11 (2), 165-173	2015
42- A New Method for Merchandizing Surplus Allocation Iman ehsani, **A Akbari Foroud,** Alireza Soofiabadi Accepted for publication in Iranian Journal of Electrical & Electronic Engineering,	2015
43- Economic analysis and optimal capacity sizing of turbo-expander-based microgrid R Ghanaee, **AA Foroud** IET Renewable Power Generation 11 (4), 511-520	2016
44-Stochastic-based resource expansion planning for a grid-connected microgrid using interval linear programming MHS Boloukat, **AA Foroud** Energy 113, 776-787	2016
45-Reserve market scheduling considering both capacity and energy bids of reserve M Bahmanzadeh, **AA Foroud** International Journal of Electrical Power & Energy Systems 81, 1-11	2016
46-Cost-effective optimal allocation and sizing of active power filters using a new fuzzy-MABICA method A Moradi Far, **A Akbari Foroud** IETE Journal of Research 62 (3), 307-322	2016
47-Recognition and assessment of different factors which affect flicker in wind turbines M Fooladi, **AA Foroud** IET Renewable Power Generation 10 (2), 250-259	2016
48-Design of joint active and reactive power reserve market: a multi-objective approach using NSGA II H Ahmadi, **AA Foroud** IET Generation, Transmission & Distribution 10 (1), 31-40	2016

49-Improvement of the simultaneous active and reactive power markets pricing and structure H Ahmadi, **AA Foroud** IET Generation, Transmission & Distribution 10 (1), 81-92	2016
50-Development of reinforcement learning algorithm to study the capacity withholding in electricity energy markets H Bakhshandeh, **A Akbari Foroud** Iranian Journal of Electrical and Electronic Engineering 12 (1), 42-51	2016
51-A new approach to locational pricing and settlement of day-ahead spinning reserve market M Amirahmadi, **A Akbari Foroud** International Transactions on Electrical Energy Systems 26 (1), 155-174	2016
52- Stochastic-based resource expansion planning for a grid-connected microgrid using interval linear programming MHS Boloukat, **AA Foroud** Energy 113, 776-787	2016
53-Impact of fault resistance and fault distance on fault current reduction ratio of hybrid SFCL MR Barzegar-Bafrooei, **A Akbari Foroud** International Transactions on Electrical Energy Systems 27 (11), e2409	2017
54-Accurate modeling of uncertainties based on their dynamics analysis in microgrid planning MS Borujeni, **AA Foroud**, A Dideban Solar Energy 155, 419-433	2017
55-A Hybrid Fuzzy DIAICA Approach for Cost-Effective Placement and Sizing of APFs A Moradifar, **A Akbari Foroud** IETE Technical Review 34 (5), 579-589	2017
56-Behavioural market power indices in a transmission-constrained electricity market H Khajeh, **AA Foroud** IET Generation, Transmission & Distribution 11 (18), 4608-4616	2017
57- Design of Reactive Power Reserve Market by Incorporating Excitation System Response Improvement Methods A Khandani, **A Akbari Foroud** Electric Power Components and Systems 45 (8), 825-838	2017
58- Intelligent localisation of multiple non-linear loads considering impact of harmonic state estimation accuracy A Moradifar, **AA Foroud,** KG Firouzjah IET Generation, Transmission & Distribution 11 (8), 1943-1953	2017

59- Detection and evaluation of effective factors on flicker phenomenon in diesel-engine driven generators M Fooladi, **AA Foroud**, AA Abdoos Applied Thermal Engineering 113, 1194-1207	2017
60- Design of reactive power and reactive power reserve market A Khandani, **AA Foroud** IET Generation, Transmission & Distribution 11 (6), 1443-1452	2017
61-Robust Bidding Strategies and Scheduling of a Price-maker Microgrid Aggregator Participating in a Pool-based Electricity Market H Khajeh, **AA Foroud**, H Firoozi IET Generation, Transmission & Distribution, 13 (4), 468-477	2018
62-Optimal sizing methodology for photovoltaic and wind hybrid rooftop generation systems in residential low voltage distribution networks V Behravesh, **AA Foroud**, R Keypour Solar Energy 173, 17-33	2018
63-Stochastic analysis of solar and wind hybrid rooftop generation systems and their impact on voltage behavior in low voltage distribution systems V Behravesh, R Keypour, **AA Foroud** Solar Energy 166, 317-333	2018
64-Performance evaluation of distance relay in the presence of hybrid SFCL MR Barzegar-Bafrooei, **AA Foroud** IET Science, Measurement & Technology, 12 (5), 581-593	2018
65-Wind speed scenario generation based on dependency structure analysis MS Borujeni, **AA Foroud**, A Dideban Journal of Wind Engineering and Industrial Aerodynamics 172, 453-465	2018
66-Multiperiod Planning of Distribution Networks under Competitive Electricity Market with Penetration of several Microgrids Part I: Modeling and Solution Methodology MH Shaban Boloukat, **A Akbari Foroud** IEEE Transactions on Industrial Informatics, Volume: 14 , Issue: 11 , Nov. 2018, pp. 4884 - 4894	2018
67-Optimizing the multi-objective bidding strategy using min–max technique and modified water wave optimization method A Azadi Hematabadi, **A Akbari Foroud** Neural Computing and Applications - Springer	2018
68-Investigation of the performance of distance relay in the presence of saturated iron core SFCL and diode bridge type SFCL MR Barzegar-Bafrooei, **AA Foroud** International Transactions on Electrical Energy Systems, 29 (2), e2736	2019

69-Identification of multiple harmonic sources in power system containing inverter-based distribution generations using empirical mode decomposition A Moradifar, **AA Foroud**, M Fouladi IET Generation, Transmission & Distribution 13 (8), 1401-1413	2019
70- Comprehensive identification of multiple harmonic sources using fuzzy logic and adjusted probabilistic neural network A Moradifar, **AA Foroud**, KG Firouzjah Neural Computing and Applications 31 (1), 543-556	2019
71-Enhanced structure and optimal capacity sizing method for turbo-expander based microgrid with simultaneous recovery of cooling and electrical energy R Ghanaee, **AA Foroud** Energy 170, 284-304	2019
72-Control strategy for improving voltage quality in residential power distribution network consisting of roof-top photovoltaic-wind hybrid systems, battery storage and electric … V Behravesh, R Keypour, **AA Foroud** Solar Energy 182, 80-95	2019
73-Multiperiod Planning of Distribution Networks Under Competitive Electricity Market With Penetration of Several Microgrids Part II: Case Study and Numerical Analysis MHS Boloukat, **AA Foroud** IEEE transactions on industrial informatics 15 (4), 2023-2031	2019
74-Studying a Novel Method for Mitigation of the Adverse Impacts of SFCL on Transmission Line Distance Protection **AA Foroud**, MR Barzegar-Bafrooei IET Generation, Transmission & Distribution	2019
75-On the Advance of SFCL: A Comprehensive Review **AA Foroud**, MR Barzegar-Bafrooei, M Niasati, JD Ashkezari IET Generation, Transmission & Distribution	2019
76-Providing transient stability by excitation system response improvement methods through long-term contracts A Khandani, **A.A Foroud** Scientia Iranica. Transaction D, Computer Science & Engineering, Electrical	2019
77-Resource Adequacy in Interdependent Electricity Markets Undergoing Heterogeneous Expansion in Renewable Energy SA Mozdawar, **A.A Foroud**, IET Generation, Transmission & Distribution	2019
78- Pumped-storage units to address spinning reserve concerns in the grids with high wind penetration I Rahmati, **A.A Foroud**	2020

Journal of Energy Storage 31, 101612	
79- A medium/long-term auction-based coalition-forming model for a virtual power plant based on stochastic programming M Jafari, **A.A Foroud** International Journal of Electrical Power & Energy Systems 118, 105784	2020
80- A new approach for static voltage stability assessment in distribution networks SE Sadeghi, **A Akbari Foroud** International Transactions on Electrical Energy Systems 30 (3), e12203	2020
81- A novel flicker detection method for vertical axis wind turbine using two-dimensional discrete wavelet transform H Doustmohammadi, **AA Foroud** international transactions on electrical energy systems	2020
82-Market power assessment through modelling of effective anti-competitive behaviour of participants E Halakou, **AA Foroud** IET Generation, Transmission & Distribution 14 (23), 5381-5391	2020
83-Harmonic reduction of three-phase power inverter injection current using virtual admittance M Izadi, **A Akbari Foroud** international transactions on electrical energy systems	2020
84-Power quality disturbances recognition using adaptive chirp mode pursuit and grasshopper optimized support vector machines SZT Motlagh, **AA Foroud** Measurement 168, 108461	2021
85-Reconstructing long-term wind speed data based on measure correlate predict method for micro-grid planning M Salehi Borujeni, A Dideban, **A Akbari Foroud** Journal of Ambient Intelligence and Humanized Computing	2021
86- Solid-state transformers: An overview of the concept, topology, and its applications H Shadfar, M Ghorbani Pashakolaei, **A Akbari Foroud** International Transactions on Electrical Energy Systems	2021
87- Island partitioning of smart distribution systems under emergency conditions considering frequency stability Z Hosseini Najafabadi, **A Akbari Foroud** International Transactions on Electrical Energy Systems	2021
88- Accelerated Hybrid Consensus Alternating Direction Method of Multipliers for Distributed Economic Power Dispatch Problem with Adaptive Penalty M Kafash Farkhad, **A Akbari Foroud** Iranian Journal of Science and Technology, Transactions of Electrical …	2021

89- New Ex-ante Indices of Market Power Considering The Impact of Renewable Energy Resources in Oligopoly Power Markets E Halakou, **A Akbari Foroud** Journal of Modeling & Simulation in Electrical & Electronics Engineering …	2021
90- Design and Experimental Verification of a Single-Phase Multi-level Asymmetric Inverter B Taheri**, A Akbari Foroud** Modeling and Simulation in Electrical and Electronics Engineering 1 (2), 51-58	2021
91- Investigation of power-based day-ahead electricity market in terms of inducing fake ramp demand, assuring real-time compatibility, support for flexibility, and providing some … I Rahmati, **A Akbari Foroud** International Transactions on Electrical Energy Systems 31 (11), e13080	2021
91- A general index for voltage stability assessment of power system SE Sadeghi, **A Akbari Foroud** International Transactions on Electrical Energy Systems 31 (12), e13155	2021
92- Multiple Electricity Markets Design Undergoing Asymmetric Policies on Renewables Expansion: Capacity Adequacy and Revenue Sufficiency SA Mozdawar, **A Akbari Foroud**, M Amirahmadi Arabian Journal for Science and Engineering 47 (3), 2781-2796	2022
93-Multiple Electricity Markets Competitiveness Undergoing Symmetric and Asymmetric Renewables Development Policies. SA Mozdawar, **AA Foroud**, M Amirahmadi Iranian Journal of Electrical & Electronic Engineering 18 (1)	2022
94-Interdependent electricity markets design: Market power and gaming SA Mozdawar, **AA Foroud**, M Amirahmadi International journal of electrical power & energy systems 136, 107641	2022
95-Market Power Prediction via Neuro-fuzzy System A Soofiabadi, **A Akbari Foroud** Iranian Journal of Science and Technology, Transactions of Electrical …	2022
96-An equilibrium-based model to investigate market performance of power-based electricity market I Rahmati, **A Akbari Foroud** IET Generation, Transmission & Distribution 16 (12), 2425-2440	2022
97-Coordinated Management of EVs Charging Station with a Wide Presence of Renewable Energy Sources M Shamani, P Talebi, **A Akbari Foroud** Modeling and Simulation in Electrical and Electronics Engineering 2 (2), 37-47	2022

98-Electric vehicles' classification for the participation of retailers in Day-Ahead energy and reserve markets taking into account different uncertainties simultaneously R Dehghani, **A.A Foroud** Iranian Electric Industry Journal of Quality and Productivity 11 (4), 48-62	2022
99-Two-stage risk assessment of the electricity retailers in the day-ahead energy and primary-secondary reserve markets with flexible demand responses and parking lots R Dehghani, **A.A Foroud** Journal of Energy Storage 55, 105626	2022
100-Design and performance optimization of a tri-generation energy hub considering demand response programs B Taheri, **AA Foroud**, F Jabari Energy Science & Engineering 11 (2), 675-684	2023
101-Introduction of a modified thermal model for squirrel cage induction motor based on calculation of rotor bars' current Y Mahmoudian, HR Izadfar, **A Akbari Foroud** Electrical Engineering 105 (1), 141-150	2023
102-Design and management of stand-alone turbo-expander-based microgrid with considering the uncertainty of input natural gas R Ghanaee, **A Akbari Foroud** Journal of the Brazilian Society of Mechanical Sciences and Engineering 45	2023
103-Multiple harmonic sources identification including inverter-based distributed generations using empirical Fourier decomposition SZT Motlagh, **A Akbari Foroud** IET Generation, Transmission & Distribution 17 (8), 1932-1954	2023
104-Microgrids Planning to Mitigate Utility Net-Load Ramping A Soofiabadi, **A Akbari Foroud** Iranian Journal of Science and Technology, Transactions of Electrical …	2023
105-Adaptive distributed demand side management with weighted dimension reduction for energy resource management in smart grid M Kafash Farkhad, **A Akbari Foroud** IET Generation, Transmission & Distribution 17 (11), 2612-263	2023
106-A green cogeneration microgrid composed of water-source heat pumps, a gravity energy storage, and a bio-fueled gas turbine: Design and techno-economic optimization B Taheri, F Jabari, **AA Foroud** Sustainable Cities and Society 95, 104594	2023
107-Two Amendments for Reserve Procurement in Electricity Markets to Enhance Real-Time Compatibility and Boost Flexibility	2023

I Rahmati, **A Akbari Foroud** Iranian Journal of Science and Technology, Transactions of Electrical	
108-Flicker source detection including fixed speed wind turbines using empirical mode decomposition S ZT Motlagh, **A Akbari Foroud** Scientia Iranica 30 (5), 1743-1763	2023
109-Adaptive distributed scheduling of the resources in smart grids with considering demand response M Kafash Farkhad, **A Akbari Foroud** Transactions of the Institute of Measurement and Control 45 (14), 2779-2793	2023
110-A Medium-Term Virtual Power Plant Optimization Framework Considering the Failure Rate of Its Intermittent Units Using Stochastic Programming M Jafari, **A Akbari Foroud** Electric Power Components and Systems, 1-16	2023
111-Maintenance scheduling of wind power plants from the viewpoint of the power plant owner with the aim of minimizing the economic loss A Allame, **A Akbari Foroud** Journal of Modeling in Engineering	2023
112-Online state estimation of power system despite faulty measurement data using the composition of ANFIS with Grasshopper Algorithm A Esmaili, **A Akbari Foroud** Computational Intelligence in Electrical Engineering 14 (4), 1-16	2024
113-Modeling and economic dispatch of a novel fresh water, methane and electricity generation system considering green hydrogenation and carbon capture M Talaie, F Jabari, **AA Foroud** Energy Conversion and Management 302, 118087	2024
114-Investigating the factors affecting the transient overvoltages caused by lightning in the low-voltage network and the role of the SPD installed in the substation in protecting … A Moradi, **A Akbari Foroud** Journal of Modeling in Engineering	2024
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