

CURRICULUM VITAE

GENERAL INFORMATION

Current Position: Full Professor

Affiliation: Faculty of Electrical and Computer Engineering (ECE), Semnan University

Address: Electrical Power Engineering Department, Electrical and Computer Engineering School,
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ACADEMIC APPOINTMENTS

Semnan University:

Academic Positions in the Faculty of Electrical and Computer Engineering:

- 2006-present Professor
- 2002-2006 Associate Professor
- 1997-2002 Assistant Profes

Administrative Positions at Semn

- 2007-present: Consultant of Semnan University Chancellor
- 2004-present: Member of the high commission of Semnan university
- 1998-2000: Director of Electrical Power Engineering Department of Semnan University

Other Appointments:

1998-present: Consultant of Iran Grid Management Company (IGMC, formerly TAVANIR)

TEACHING AND RESEARCH INTERESTS

Research Interests:

- **Power system operation:** Security constrained economic dispatch, security constrained unit commitment, security constrained optimal power flow, hydro-thermal Coordination and reliability evaluation of power systems.
- **Energy system forecasting:** Short-term and mid-term electricity demand forecasting; electricity price forecasting, spinning reserve requirement forecasting and wind power forecasting.

- **Electricity market design and management:** Stochastic and multi-objective energy market clearing, multi-objective congestion management, multi-objective reactive power market design and operation, and design of bidding strategy for energy and joint markets
- **Power system Stability and control:** Transient stability assessment and enhancement, voltage stability assessment and enhancement, small signal stability assessment, frequency stability evaluation

Publications:

- More than 100 technical articles and 1 book; 50 presentations, invited lectures, and conference chairmanship

Research Supervision and Activities:

- 4 doctoral dissertations and 60 Master's thesis students

Technical Courses Taught:

- Advanced Operation of Power Systems, Power System Restructuring, Reliability of Power Systems, Modern Control, Application of Neural Networks in Power Systems, Application of Intelligent Systems in Power Systems, Advanced Engineering Mathematics, Power System Analysis I & II.

EDUCATION

- Ph.D. Electrical Engineering Department, Sharif University of Technology, Tehran, Iran, 1997 (High Honors)
- M.S. Electrical Engineering Department, Sharif University of Technology, Tehran, Iran, 1994 (High Honors)
- B.S. Electrical Engineering Department, Sharif University of Technology, Tehran, Iran, 1992 (High Honors)

EXPERIENCES in INDUSTRY

- Consultant of Iran Grid Management Company (IGMC, formerly TAVANIR) since 1998 to present
- Manager of some national projects as follows:
 - Design of three regional dispatching centers (RDC) for Kerman regional electric company (KREC), Hormozgan regional electric company (HREC) and Esfahan regional electric company (EREC) of Iran and design of a distribution control center (DCC) for Hormozgan regional electric company (HREC) of Iran
 - Design and implementation of a fault diagnosis system for transmission and sub-transmission networks

- Extensive transmission system studies for Bakhtar regional electric company (BREC) of Iran
- Extensive distribution system studies for Semnan regional electric company (SREC) of Iran

HONORS AND AWARDS

- Youngest Professor of Iran, selected by the ministry of Science, Research and Technology of Iran in 2006
- Distinguished researcher award of Iran in engineering group in 2013
- Second score of the international CIFE competition in 2012
- Excellent author award of Semnan state of Iran in 2004
- Distinguished researcher award among all universities of Semnan state of Iran in 2003
- Distinguished researcher award of Semnan university in 1999, 2003, 2005, 2007, 2009, 2010, 2011 and 2013
- Distinguished faculty award of Semnan university in 2000
- Technical paper award from power system conference (PSC) in 1998, 1999, 2000 and 2001
- First rank Ph.D. graduate student in the Electrical Engineering School of Sharif University of Technology in 1997

EDITORIAL BOARD MEMBERSHIP

Member of Editorial Boards:

2009-present: Editor-in-chief of Modeling in Engineering Journal

REFEREEING

I referee about 25 journal papers per year. Since 2003, I have refereed for the following journals:

- IEEE Transactions on Power Systems (IEEE)
- IEEE Transactions on Power Delivery (IEEE)
- IEEE Transactions on Sustainable Energy (IEEE)
- IET Generation, Transmission & Distribution (formerly IEE Proceedings)
- IET Science, Measurement & Technology
- Electric Power Systems Research (Elsevier)
- International Journal of Electrical Power and Energy Systems (Elsevier)
- Energy (Elsevier)
- Applied Soft Computing (Elsevier)

- European Transactions on Electric Power (Wiley InetrScience)
- Electric Power Components and Systems (Taylor and Francis)

MEMBERSHIP OF ASSOCIATIONS

- Senior Member, Institute of Electrical and Electronics Engineers (IEEE)

SELECTED PUBLICATIONS

A) BOOKS

1. N. **Amjady**, Introduction to Intelligent Systems, *Semnan University Press*, 2002.

B) Book Chapters

1. N. **Amjady**, Electric Power Systems: Advanced Forecasting Techniques and Optimal Generation Scheduling, CRC Press, Taylor & Francis, 2012, Chapter 4.

C) PEER-REVIEWED PUBLICATIONS

- **IEEE Transactions on Power Systems**

1. J. Aghaei, N. Amjady, A. Baharvandi, M. A. Akbari, ↵Generation and Transmission Expansion Planning: MILP-Based Probabilistic Model,↵accepted, in-print.
2. S. Dehghan, N. Amjady, A. Kazemi, ↵Two-Stage Robust Generation Expansion Planning: A Mixed Integer Linear Programming Model,↵accepted, in-print.
3. A. M. Jafari, H. Zareipour, A. Schellenberg, N. **Amjady**, ↵The Value of Intra-Day Markets in Power Systems with High Wind Power Penetration,↵accepted, in-print.
4. B. Mohammadi-Ivatloo, H. Zareipour, N. **Amjady**, M. Ehsan, ↵Application of Information-Gap Decision Theory to Risk-Constrained Self-Scheduling of GenCos,↵*IEEE Transactions on Power Systems*, Vol. 28, No. 2, pp. 1093-1102, May 2013.
5. M. Nejati, N. **Amjady**, and H. Zareipour, ↵A New Stochastic Search Technique Combined with Scenario Approach for Dynamic State Estimation of Power Systems,↵*IEEE Transactions on Power Systems*, Vol. 27, No. 4, pp. 2093-2105, Nov. 2012.

6. **N. Amjady**, H. Fatemi, and H. Zareipour, "Solution of Optimal Power Flow Subject to Security Constraints by a New Improved Bacterial Foraging Method," *IEEE Transactions on Power Systems*, Vol. 27, No. 3, pp. 1311-1323, August 2012.
7. **N. Amjady**, A. Daraeepour, "Mid-Term Demand Prediction of Electrical Power Systems Using a New Hybrid Forecast Technique," *IEEE Transactions on Power Systems*, Vol. 26, No. 2, pp. 755-765, May 2011.
8. **N. Amjady**, J. Aghaei and H. A. Shayanfar, "Stochastic Multiobjective Market Clearing of Joint Energy and Reserves Auctions Ensuring Power System Security," *IEEE Transactions on Power Systems*, Vol. 24, No. 4, pp. 1841-1854, November 2009.
9. **N. Amjady** and H. Nasiri-Rad, "Nonconvex Economic Dispatch With AC Constraints by a New Real Coded Genetic Algorithm," *IEEE Transactions on Power Systems*, Vol. 24, No. 3, pp. 1489-1502, August 2009.
10. **N. Amjady** and F. Keynia, "Day-Ahead Price Forecasting of Electricity Markets by Mutual Information Technique and Cascaded Neuro-Evolutionary Algorithm," *IEEE Transactions on Power Systems*, Vol. 24, No. 1, pp. 306-318, February 2009.
11. **N. Amjady** and S. F. Majedi, "Transient Stability Prediction by a Hybrid Intelligent System," *IEEE Transactions on Power Systems*, Vol. 22, No. 3, pp. 1275-1283, August 2007.
12. **N. Amjady**, "Short-Term Bus Load Forecasting of Power Systems by a New Hybrid Method," *IEEE Transactions on Power Systems*, Vol. 22, No. 1, pp. 333-341, February 2007.
13. **N. Amjady**, "Generation adequacy assessment of power systems by time series and fuzzy neural network," *IEEE Transactions on Power Systems*, Vol. 21, No. 3, pp. 1340-1349, August 2006.
14. **N. Amjady**, "Day-ahead price forecasting of electricity markets by a new fuzzy neural network," *IEEE Transactions on Power Systems*, Vol. 21, No. 2, pp. 887-896, May 2006.
15. **N. Amjady** and M. Esmaili, "Application of a new sensitivity analysis framework for voltage contingency ranking," *IEEE Transactions on Power Systems*, Vol. 20, No. 2, pp. 973-983, May 2005.

16. **N. Amjady**, †A framework of reliability assessment with consideration effect of transient and voltage stabilities,†*IEEE Transactions on Power Systems*, Vol. 19, No. 2, pp. 1005-1014, May 2004.
 17. **N. Amjady**, D. Farrokhzad and M. Modarres, †Optimal reliable operation of hydrothermal power systems with random unit outages,†*IEEE Transactions on Power Systems*, Vol. 18, No. 4, pp. 798-805, February 2003.
 18. **N. Amjady**, †Short-term hourly load forecasting using time-series modeling with peak load estimation capability,†*IEEE Transactions on Power Systems*, Vol. 16, No. 4, pp. 798-805, November 2001.
 19. **N. Amjady** and M. Ehsan, †Evaluation of power systems reliability by an artificial neural network,†*IEEE Transactions on Power Systems*, Vol. 14, No. 1, pp. 287-292, February 1999.
- **IEEE Transactions on Smart Grid**
 20. D. Huang, H. Zareipour, W. D. Resohart, and **N. Amjady**, †Data Mining for Electricity Price Classification and the Application to Demand-Side Management,†*IEEE Transactions on Smart Grid*, Vol. 3, No. 2, pp. 808-817, June 2012.
 21. **N. Amjady**, F. Keynia, and H. Zareipour, †Short-Term Load Forecast of Microgrids by a New Bi-level Prediction strategy,†*IEEE Transactions on Smart Grid*, Vol. 1, No. 3, pp. 286-294, December 2010.
 - **IEEE Transactions on Sustainable Energy**
 22. **N. Amjady**, F. Keynia, and H. Zareipour, †Wind Power Prediction by a New Forecast Engine Composed of Modified Hybrid Neural Networks and Enhanced Particle Swarm Optimization,†*IEEE Transactions on Sustainable Energy*, Vol. 2, No. 3, pp. 265-276, July 2011.
 - **IEEE Power & Energy Magazine**
 23. A. Rabiee, H. A. Shayanfar and **N. Amjady**, †Reactive power pricing,†*IEEE Power & Energy Magazine*, Vol. 7, No. 1, pp. 18-32, January-February 2009.

24. N. Amjady and M. Hemmati, Energy price forecasting - problems and proposals for such predictions, IEEE Power and Energy Magazine, Vol. 4, No. 2, pp. 20-29, March-April 2006.

▪ **IET Generation, Transmission & distribution**

25. M. Derafshian Maram, N. Amjady, "An Event-Based Remedial Action Scheme against Super-Component Contingencies to Avert Frequency and Voltage Instabilities," accepted, in-print.

26. S. Dehghan, A. Kazemi, N. Amjady, Multi-Objective Robust Transmission Expansion Planning Using Information-Gap Decision Theory and Augmented ε -Constraint Method, IET-Generation Transmission and Distribution, accepted, in-print.

27. M. S. Jahan, N. Amjady, Solution of large scale security constrained optimal power flow by a new bi-level optimization approach based on enhanced gravitational search algorithm, IET-Generation Transmission and Distribution, Vol. 7, No. 12, pp. 1481-1491, December 2013.

28. B. Alizadeh, S. Dehghan, N. Amjady, S. Jadid, A. Kazemi, Robust Transmission System Expansion Considering Planning Uncertainties, IET-Generation Transmission and Distribution, Vol. 7, No. 11, pp. 1318-1331, November 2013.

29. B. Vatani, N. Amjady, H. Zareipour, Stochastic Self-Scheduling of Generation Companies in Day-Ahead Multi-Auction Electricity Markets Considering Uncertainty of Units and Electricity Market Prices, IET-Generation Transmission and Distribution, Vol. 7, No. 7, pp. 735-744, July 2013.

30. N. Amjady and S. A. Banihashemi, Transient stability prediction of power systems by a new synchronism status index and hybrid classifier, IET-Generation Transmission and Distribution, Vol. 4, No. 4, pp. 509-518, April 2010.

31. N. Amjady, A. Daraeepour and F. Keynia, Day-Ahead Electricity Price Forecasting by Modified Relief Algorithm and Hybrid Neural Network, IET-Generation Transmission and Distribution, Vol. 4, No. 3, pp. 432-444, March 2010.

32. N. Amjady and H. Nasiri-Rad, Economic dispatch using an efficient real-coded genetic algorithm, IET Generation, Transmission & Distribution, Vol. 3, No. 3, pp. 266-278, March 2009.

- **Electric Power System Research**

33. N. Amjady, F. Keynia, H. Zareipour, ၫShort-Term Wind Power Forecasting Using Ridgelet Neural Network, ၫElectric Power Systems Research, Vol. 81, No. 12, pp. 2099-2107, December 2011.
34. N. Amjady and H. Sharifzadeh, ၫSecurity Constrained Optimal Power Flow Considering Detailed Generator Model by a New Robust Differential Evolution Algorithm, ၫElectric Power Systems Research, Vol. 81, No. 2, pp. 740-749, February 2011.
35. B. Mohammadi-Ivatloo, H. Zareipour, M. Ehsan and N. Amjady, ၫEconomic Impact of Price Forecasting Inaccuracies on Self-scheduling of Generation Companies, ၫElectric Power Systems Research, Vol. 81, No. 2, pp. 617-624, February 2011.
36. N. Amjady and H. R. Soleymanpour, ၫDaily Hydrothermal Generation Scheduling by a new Modified Adaptive Particle Swarm Optimization technique, ၫElectric Power Systems Research, Vol. 80, No. 6, pp. 723-732, June 2010.
37. N. Amjady and F. Keynia, ၫElectricity market price spike analysis by a hybrid data model and feature selection technique, ၫElectric Power Systems Research, Vol. 80, No. 3, pp. 318-327, March 2010.
38. N. Amjady and A. Daraeepour, ၫMixed price and load forecasting of electricity markets by a new iterative prediction method, ၫElectric Power Systems Research, Vol. 79, No. 9, pp. 1329-1336, September 2009.
39. N. Bigdeli, K. Afshar and N. Amjady, ၫMarket data analysis and short-term price forecasting in the Iran electricity market with pay-as-bid payment mechanism, ၫElectric Power Systems Research, Vol. 79, No. 6, pp. 888-898, June 2009.
40. K. Afshar, M. Ehsan, M. Fotuhi-Firuzabad and N. Amjady, ၫA method for reserve clearing in disaggregated model considering lost opportunity cost, ၫElectric Power Systems Research, Vol. 78, No. 4, pp. 527-538, April 2008.
41. N. Amjady, ၫDynamic voltage security assessment by a neural network based method, ၫElectric Power System Research, Vol. 66, No. 3, pp. 215-226, September 2003.

42. N. Amjady and M. Esmaili, Voltage security assessment and vulnerable bus ranking of power systems, *Electric Power System Research*, Vol. 64, No. 3, pp. 227-237, March 2003.

▪ **International Journal of Electric Power & Energy Systems**

43. M. Hemmati, N. Amjady, M. Ehsan, System Modeling and Optimization for Islanded Micro-grid Using Multi-cross Learning-based Chaotic Differential Evolution Algorithm, *International Journal of Electrical Power & Energy Systems*, Vol. 56, pp. 349-360, March 2014.

44. M. Samiee, N. Amjady and H. Sharifzadeh, Security Constrained Unit Commitment of Power Systems by a New Combinatorial Solution Strategy Composed of Enhanced Harmony Search Algorithm and Numerical Optimization, *International Journal of Electrical Power & Energy Systems*, Vol. 44, No. 1, pp. 471-481, January 2013.

45. J. Aghaei and N. Amjady, A Scenario-Based Multiobjective Operation of Electricity Markets Enhancing Transient Stability, *International Journal of Electrical Power & Energy Systems*, Vol. 35, No. 1, pp. 112-122, February 2012.

46. N. Amjady and H. Sharifzadeh, Solution of Non-Convex Economic Dispatch Problem Considering Valve Loading Effect by a New Modified Differential Evolution Algorithm, *International Journal of Electrical Power & Energy Systems*, Vol. 32, No. 8, pp. 893-903, October 2010.

47. N. Amjady and F. Keynia, Day ahead price forecasting of electricity markets by a mixed data model and hybrid forecast method, *International Journal of Electrical Power & Energy Systems*, Vol. 30, No. 9, pp. 533-546, November 2008.

48. N. Amjady and M. Esmaili, Improving voltage security assessment and ranking vulnerable buses with consideration of power system limits, *International Journal of Electrical Power & Energy Systems*, Vol. 25, No. 9, pp. 705-7155, November 2003.

▪ **European Transactions on Electrical Power**

49. M. Derafshian Maram, **N. Amjady**, "A new two-stage framework for voltage stability enhancement incorporating preventive and corrective control actions," accepted, in-print.
50. **N. Amjady**, and M. R. Ansari, "Non-Convex Security Constrained Optimal Power Flow by a New Solution Method Composed of Benders Decomposition and Special Ordered Sets," DOI: 10.1002/etep.1742.
51. O. Abedinia, **N. Amjady**, A. Ghasemi, Z. Hejrati, "Solution of Economic Load Dispatch Problem via Hybrid PSO-TVAC and BFA Techniques," Vol. 23, No. 8, pp. 1504-1522, Nov. 2013.
52. **N. Amjady**, A. A. Rashidi, H. Zareipour, "Stochastic Security Constrained Joint Market Clearing for Energy and Reserves Auctions Considering Uncertainties of Wind Power Producers and Unreliable Equipment," Vol. 23, No. 4, pp. 451-472, May 2013.
53. **N. Amjady**, F. Keynia, H. Zareipour, "A New Hybrid Iterative Method for Short Term Wind Speed Forecasting," *European Transactions on Electrical Power*, Vol. 21, No. 1, pp. 581-595, January 2011.
54. J. Aghaei, **N. Amjady**, and H. A. Shayanfar, "Demand-side Reserve in Stochastic Market Clearing of Joint Energy/Reserve Auctions," *European Transactions on Electrical Power*, Vol. 21, No. 1, pp. 565-580, January 2011.
55. **N. Amjady**, M. H. Velayati, "Dynamic Voltage Stability Prediction of Power Systems by a New Feature Selection Technique and Probabilistic Neural Network," *European Transactions on Electrical Power*, Vol. 21, No. 1, pp. 312-328, January 2011.
56. M. Esmaili, **N. Amjady**, and H. A. Shayanfar, "Stochastic multi-objective congestion management in power markets improving voltage and transient stabilities," *European Transactions on Electrical Power*, Vol. 21, No. 1, pp. 99-115, January 2011.
57. **N. Amjady**, A. Rabiee, H. A. Shayanfar, "Multiobjective clearing of coupled active and reactive power market considering power system security," *European Transactions on Electrical Power*, Vol. 20, No. 8, pp. 1190-1208, November 2010.
58. J. Aghaei, H. A. Shayanfar and **N. Amjady**, "Incorporating power system security into market-clearing of day-ahead joint energy and reserves auctions," *European Transactions on Electrical Power*, Vol. 20, No. 2, pp. 140-156, March 2010.

59. **N. Amjady** and A. Shirzadi, †Unit commitment using a new integer coded genetic algorithm, †*European Transactions on Electrical Power*, Vol. 19, No. 8, pp. 1161-1176, November 2009.

60. **N. Amjady** and M. Hemmati, †Day-ahead price forecasting of electricity markets by a hybrid intelligent system, †*European Transactions on Electrical Power*, Vol. 19, No. 1, pp. 89-102, January 2009.

▪ **Electric Power Components and Systems**

61. **N. Amjady** and M. R. Ansari, †Security constrained unit commitment considering hydro units and AC network modeling by a new hybrid solution method composed of Benders decomposition and Outer approximation, †*Electric Power Components and Systems*, Vol. 40, Issue 13, pp. 1445-1469, 2012.

▪ **Applied Energy**

62. M. Esmaili, **N. Amjady**, and H. A. Shayanfar, †Multi-objective Congestion Management by Modified Augmented Epsilon Constraint Method, †*Applied Energy*, Vol. 88, No. 3, pp. 755-766, March 2011.

63. **N. Amjady** and F. Keynia, †A new spinning reserve requirement forecast method for deregulated electricity markets, †*Applied Energy*, Vol. 87, No. 6, pp. 1870-1879, June 2010.

64. M. Esmaili, H. A. Shayanfar and **N. Amjady**, †Congestion management enhancing transient stability of power systems, †*Applied Energy*, Vol. 87, No. 3, pp. 971-981, March 2010.

65. A. Rabiee, H. A. Shayanfar and **N. Amjady**, †Multiobjective clearing of reactive power market in deregulated power systems, †*Applied Energy*, Vol. 86, No. 9, pp. 1555-1564, September 2009.

66. J. Aghaei, H. A. Shayanfar and **N. Amjady**, †Joint market clearing in a stochastic framework considering power system security, †*Applied Energy*, Vol. 86, No. 9, pp. 1675-1682, September 2009.

▪ **Energy**

67. **N. Amjady**, A. Rabiee and H. A. Shayanfar, †A stochastic framework for clearing of reactive power market, †*Energy*, Vol. 35, No. 1, pp. 239-245, January 2010.

68. **N. Amjady**, J. Aghaei and H. A. Shayanfar, "Market clearing of joint energy and reserves auctions using augmented payment minimization," *Energy*, Vol. 34, No. 10, pp. 1552-1559, October 2009.
69. M. Esmaili, H. A. Shayanfar and **N. Amjady**, "Multi-objective congestion management incorporating voltage and transient stabilities," *Energy*, Vol. 34, No. 9, pp. 1401-1412, September 2009.
70. **N. Amjady** and F. Keynia, "Short-term load forecasting of power systems by combination of wavelet transform and neuro-evolutionary algorithm," *Energy*, Vol. 34, No. 1, pp. 46-57, January 2009.

▪ **Electrical Engineering**

71. A. Rabiee, **N. Amjady**, and H. A. Shayanfar, "Reactive Power Market Development Considering Power System Security," *Electrical Engineering*, Vol. 92, No. 4-5, October 2010, pp. 151-164.

▪ **Energy Conversion & Management**

72. M. Ahmadigorji, **N. Amjady**, "A new evolutionary solution method for dynamic expansion planning of DG-integrated primary distribution networks," accepted, in-print.
73. **N. Amjady**, V. Vahidinasab, "Security-constrained self-scheduling of generation companies in day-ahead electricity markets considering financial risk," *Energy Conversion and Management*, Vol. 65, January, 2013, pp. 164-172.
74. **N. Amjady**, M. R. Ansari, "Hydrothermal Unit Commitment with AC Constraints by a New Solution Method Based on Benders Decomposition," *Energy Conversion and Management*, Vol. 65, January 2013, pp. 57-65.
75. **N. Amjady**, M. Hakimi, "Dynamic Voltage stability Constrained Congestion Management Framework for Deregulated Electricity Markets," *Energy Conversion and Management*, Vol. 58, No. 6, June 2012, pp. 66-75.
76. **N. Amjady**, H. Nasiri-Rad, "Security Constrained Unit Commitment by a New Adaptive Hybrid Stochastic Search Technique," *Energy Conversion and Management*, Vol. 52, No. 2, February 2011, pp. 1097-1106.

77. M. Esmaili, **N. Amjady**, H. A. Shayanfar, \sphericalangle Stochastic Congestion Management in Power Markets Using Efficient Scenario Approaches, \sphericalangle *Energy Conversion and Management*, Vol. 51, No. 11, November 2010, pp. 2285-2293.
78. **N. Amjady**, F. Fallahi, \sphericalangle Determination of frequency stability border of power system to set the thresholds of under frequency load shedding relays, \sphericalangle *Energy Conversion and Management*, Vol. 51, No. 10, October 2010, pp. 1864-1872.
79. **N. Amjady**, A. Rabiee and H. A. Shayanfar, \sphericalangle Pay-as-bid based reactive power market, \sphericalangle *Energy Conversion and Management*, Vol. 51, No. 2, pp. 376-381, February 2010.
80. **N. Amjady** and F. Keynia, \sphericalangle Day-ahead price forecasting of electricity markets by a new feature selection algorithm and cascaded neural network technique, \sphericalangle *Energy Conversion and Management*, Vol. 50, No. 12, pp. 2976-2982, December 2009.
81. **N. Amjady** and M. H. Velayati, \sphericalangle Evaluation of the maximum loadability point of power systems considering the effect of static load models, \sphericalangle *Energy Conversion and Management*, Vol. 50, No. 12, pp. 3202-3210, December 2009.
82. M. Esmaili, H. A. Shayanfar and **N. Amjady**, \sphericalangle Congestion management considering voltage security of power systems, \sphericalangle *Energy Conversion and Management*, Vol. 50, No. 10, pp. 2562-2569, October 2009.
83. J. Aghaei, H. A. Shayanfar and **N. Amjady**, \sphericalangle Multi-objective market clearing of joint energy and reserves auctions ensuring power system security, \sphericalangle *Energy Conversion and Management*, Vol. 50, No. 4, pp. 1675-1682, April 2009.
84. A. Rabiee, H. A. Shayanfar and **N. Amjady**, \sphericalangle Coupled energy and reactive power market clearing considering power system security, \sphericalangle *Energy Conversion and Management*, Vol. 50, No. 4, pp. 907-915, April 2009.
85. **N. Amjady** and M. R. Ansari, \sphericalangle Small disturbance voltage stability assessment of power systems by modal analysis and dynamic simulation, \sphericalangle *Energy Conversion and Management*, Vol. 49, No. 10, pp. 2629-2641, October 2008.
86. **N. Amjady** and F. Keynia, \sphericalangle Mid-term load forecasting of power systems by a new prediction method, \sphericalangle *Energy Conversion and Management*, Vol. 49, No. 10, pp. 2678-2687, October 2008.

- **Expert Systems with Applications**

87. **N. Amjady** and H. Nasiri-Rad, Solution of nonconvex and nonsmooth economic dispatch by a new Adaptive Real Coded Genetic Algorithm, *Expert Systems with Applications*, Vol. 37, No. 7, pp. 5239-5245, July 2010.
88. **N. Amjady** and A. Daraeepour, Design of Input vector for day-ahead price forecasting of electricity markets, *Expert Systems with Applications*, Vol. 36, No. 10, pp. 12281-12294, December 2009.

- **Applied Soft Computing**

89. **N. Amjady**, F. Keynia, A New Prediction Strategy for Price Spike Forecasting of Day-Ahead Electricity Markets, *Applied Soft Computing*, Vol. 11, No. 6, pp. 4246-4256, September 2011.
90. J. Aghaei, **N. Amjady** and H. A. Shayanfar, Multi-objective electricity market clearing considering dynamic security by lexicographic optimization and augmented epsilon constraint method, *Applied Soft Computing*, Vol. 11, No. 4, pp. 3846-3858, June 2011.
91. **N. Amjady** and F. Keynia, Application of a new hybrid neuro-evolutionary system for day-ahead price forecasting of electricity markets, *Applied Soft Computing*, Vol. 10, No. 3, pp. 784-792, June 2010.

- **AUTOMATIKA**

92. M. Mehrasa, M. Ahmadigorji, N. Amjady, " A New Dual Lagrangian Model and Input/Output Feedback Linearization Control of 3-Phase/Level NPC Voltage-Source Rectifier," *AUTOMATIKA*, Vol. 55, No. 1, pp. 99-111, January 2014.

- **Applied Mathematics and Computation**

93. K. Afshar, M. Ehsan, M. Fotuhi-Firuzabad and **N. Amjady**, Cost-benefit analysis and MILP for optimal reserve capacity determination in power system, *Applied Mathematics and Computation*, Vol. 196, No. 2, pp. 752-761, March 2008.

- **Asia-Pacific Journal of Operational Research**

94. J. Aghaei, H. A. Shayanfar and **N. Amjady**, Stochastic market-clearing of joint energy and reserves auctions, *Asia-Pacific Journal of Operational Research*, Vol. 27, No. 5, pp. 587-606, October 2010.

- **International Review of Electrical Engineering**

95. N. Amjady and M. H. Velayati, Evaluation of Hopf Bifurcation Considering the Effect of Load Models and Excitation System Parameters, *International Review of Electrical Engineering (I.R.E.E.)*, Vol. 6, No. 5, pp. 2419-2427, September-October 2011.

- **Energies**

96. N. Amjady and F. Keynia, Short Term Load Forecast of Electrical Power Systems by a New Neural Network Approach, *Energies*, Vol. 4, No. 3, pp. 488-503, March 2011.

- **Canadian Journal of Electrical and Computer Engineering**

97. N. Amjady, Application of a new neural network to on-line voltage stability assessment, *Canadian Journal of Electrical & Computer Engineering*, Vol. 25, No. 2, pp. 69-75, April 2000.

98. N. Amjady and M. Ehsan, Transient stability assessment of power systems by a new estimating neural network, *Canadian Journal of Electrical & Computer Engineering*, Vol. 22, No. 3, pp. 131-137, July 1997.

- **J. Basic Appl. Sci. Res.**

99. M. Derafshian Maram, N. Amjady, A. Rezaey, An Optimal Load Cut Policy with Event-Driven Design against Voltage Instability Using Theta-Particle Swarm Optimization, *J. Basic Appl. Sci. Res.*, Vol. 3, No. 3, pp. 91-100, 2013.

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