MOHAMMAD SHAHIDEHPOUR, IEEE Fellow
Member, US National Academy of Engineering

SUMMARY OF ACTIVITIES

Dr. Mohammad Shahidehpour joined Illinois Institute of Technology. He is the Bodine Chair Professor in the Electrical and Computer Engineering Department, Director of the Robert W. Galvin Center for Electricity Innovation, and Associate Director of WISER at IIT. He is an IEEE Fellow and a member of the US National Academy of Engineering.

Dr. Shahidehpour was the recipient of IEEE PES Douglas M. Staszesky Distribution Automation Award, IEEE PES Outstanding Power Engineering Educator Award, IEEE PES T. Burke Hayes Faculty Recognition Award, IEEE PES Outstanding Engineer Award, Chicago Chapter, Edison Electric Institute's Power Engineering Educator Award, C. Holmes MacDonald Outstanding Young Electrical Engineering Professor Award, Romanian Association of Engineers' Outstanding Author Award, Illinois Technology Association's Technologist of the Year Award, Sigma Xi Society's Outstanding Senior Faculty Research Award, Electrical Engineering Department Head Association's Innovative Program Award, and IIT's Research Leadership and Excellence in Teaching Awards.

Dr. Shahidehpour was the 2009 recipient of the honorary doctorate from the Polytechnic University of Bucharest. He is the holder of Nourbakhshian Endowed Chair Professorship, University of Kashan, Iran, and Otto Monsted Professorship, Technical University of Denmark. He is a Research Professor at King Abdulaziz University (Saudi Arabia), Sharif University of Technology (Iran), as well as several universities in China including Tsinghua University, Xian Jiaotong University, Nanjing University, North China Electric Power University, and Hunan University.

He is the Principal Investigator of $60 million grants and contracts on smart grid research and development. His DOE Project on Perfect Power Systems has converted the entire IIT Campus to an islanded microgrid. He has initiated CSMART (Center for Smart Grid Applications, Research, and Technology) at IIT for promoting the smart grid cybersecurity research and implementation and enhancing the resilience of wireless networked communication and control systems in smart cities. He is a member of SPIKE Center in the Stuart School of Business at IIT which is facilitating the design and the implementation of affordable microgrids in impoverished nations.

Dr. Shahidehpour has supervised 120 visiting faculty, and graduate research students at IIT. He has co-authored 6 books and 450 papers on electric power system operation and planning and was the recipient of 8 best paper awards for his IEEE publications. He is an IEEE PES Distinguished Lecturer and served as the VP of Publications for the IEEE Power and Energy Society, Editor of IEEE Transactions on Power Systems, and the founding Editor-in-Chief of the IEEE Transactions on Smart Grid.

Contact Information:

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Related Links:

http://www.galvincenter.org
http://scholar.google.com/citations?user=Wbk0-zYAAAAJ&hl=en&oi=ao
https://www.researchgate.net/profile/M_Shahidehpour
https://www.facebook.com/mohammad.shahidehpour.1
https://www.linkedin.com/in/mohammad-shahidehpour-a8a6773a?trk=hp-identity-photo

ACADEMIC APPOINTMENTS

Academic Positions at Illinois Institute of Technology

- Bodine Chair Professor, Electrical and Computer Engineering Department (2005-present)
- Professor, Stuart School of Business (dual appointment, 2014-present)
- Professor, Electrical and Computer Engineering Department (1991-2005)
- Associate Professor, Electrical and Computer Engineering Department (1986-1991)
- Assistant Professor, Electrical and Computer Engineering Department (1983-1986)

Research and Administrative Positions at Illinois Institute of Technology

- Vice Provost for Research and Dean of the Graduate College (1994-2000)
- Associate Dean of Engineering for Research and Graduate Studies (1993-1994)
- Chair, ECE Department (2005-2010)
- Director, CSMART (2014-Present, Center for Smart-Grid Applications, Research, and Technology)
- Director, Robert W. Galvin Center for Electricity Innovation (2010-Present)
- Director, Electric Power and Power Electronics Center (2000-2005)
- Associate Director, Wanger Institute for Sustainable Energy Research (2010-Present)
- Associate Chairman, Electrical and Computer Engineering Department (1986-1991)
- Director of Graduate Studies, Electrical and Computer Engineering Department (1985-1986)

Honorary Appointments

- Nourbakhshian Endowed Chair Professorship, Kashan University, Iran (2016-present)
- Otto Monsted Professorship, Technical University of Denmark (2016)
- Research Professor, Tsinghua University, China (2015-present)
- Research Professor, Xian Jiaotong University, China (2015-present)
- Research Professor, Hunan University, China (2015-present)
- Research Professor, Southeast University, China (2015-present)
- Research Professor, King Abdulaziz University, Jeddah, Saudi Arabia (2011-present)
- Research Professor, Sharif University of Technology, Iran (2006-present)
- Research Professor, North China Electric Power University, Beijing (2002-present)

HONORS AND AWARDS

- Member, US National Academy of Engineering (2016)
- Fellow of IEEE (for contributions to security-constrained unit commitment, 2001)
- IEEE PES Douglas M. Staszesky Distribution Automation Award (2016)
- IEEE PES Outstanding Power Engineering Educator Award (2012)
- IEEE PES T. Burke Hayes Faculty Recognition Award in Electric Power Engineering (2007)
- IEEE PES Best paper Award (total of 6 in 2004, 2005, 2008, 2015)
- IEEE PES Distinguished Lecturer (2003-present, has made 150 presentations in 25 countries)
- IEEE PES Distinguished Service Award (2012, 2011, 2009, 2008, 2007, 2006, 2000, 1995)
- IEEE PES Distinguished Mentoring Award, Chicago Chapter (2009)
- IEEE PES Outstanding Engineer Award, Chicago Chapter (2011)
- Edison Electric Institute's Power Engineering Educator Award (1993)
- C. Holmes MacDonald Outstanding Young Electrical Engineering Professor Award (1990)
- Romanian Association of Engineers (Outstanding Author Award, 2013, joint with Prof. Eremia)
- Illinois Technology Association (Technologist of the Year Award, 2011)
- Sigma Xi Society (Outstanding Senior Faculty Research Award, 2003)
- Electrical Engineering Department Head Association (Innovative Program Award, 2011)
- IIT's Research Leadership Award (2010)
- IIT's Excellence in Teaching Award (1990)
- IIT's Outstanding HKN Chapter Advisor Award (1988)
- Honorary Doctorate, Polytechnic University of Bucharest, Romania, June 2009 (2009)
- Nourbakhshian Endowed Chair Professorship, University of Kashan, Iran (2016-present)
- Otto Monsted Professorship, Technical University of Denmark (2016)
- Judd Distinguished Lectureship, University of Utah (2016)
- iCONE Distinguished Speaker, University of North Carolina (2016)
- UMERC Distinguished Lecture, University of Virginia (2014)
- National President of HKN (2000, Board President for the EE Honor Society)
- Founding Editor-in-Chief, IEEE Transactions on Smart Grid (2009-2014)
- Listed as one of the 50 R&D Stars to Watch, Industry Week magazine (1993)
- Best Technical Paper Award, North American Power Symposium (1999)
- Distinguished Service Award, American Power Conference (1994)

TEACHING AND RESEARCH INTERESTS

Research Interests: Power system operation and planning, microgrid design and operation, sustainable energy integration, cyber-physical systems, computational economics, and decision analyses

Publications and Presentations: Over 450 technical articles and 6 books; 300 presentations and invited colloquia at conferences and workshops, and outreach campaigns for the promotion of smart grid applications in various global communities

Research Supervision and Activities: 54 PhD and 31 master's degree students, and 41 visiting professors

Technical Courses Taught: Elements of Smart Grid, Microgrid Design and Operation, Power System Planning, Market Operations in Power Systems, Operation and Control of Power Systems, Communication and Control in Power Systems, Renewable Electric Power Systems, Optimization Theory and Applications, Stochastic Methods Applied to Power Systems, Deregulated Power Systems, Maintenance Scheduling in Power Systems, Control and Stability of Power Systems, Fault Tolerant Power Systems, Power System Reliability, Computational Methods in Power Systems, Power System Analysis, Linear Control Systems.

EDUCATION

Honorary Doctorate Polytechnic University of Bucharest, Romania, 2009

Ph.D. Electrical Engineering Department, University of Missouri, Columbia, 1981

M.S. Electrical Engineering Department, University of Missouri, Columbia, 1978

B.S. Electrical Engineering Department, Sharif University of Technology, Iran, 1977 (High Honors)

BOOKS

1. M. **Shahidehpour** and M. Marwali, Maintenance Scheduling in Restructured Power Systems, Springer, May 2000
2. M. **Shahidehpour** and M. Alomoush, Restructured Electrical Power Systems, Taylor and Francis, June 2001
3. M. **Shahidehpour**, H. Yamin and Z. Li, Market Operations in Electric Power Systems, John Wiley and Sons, March 2002
4. M. **Shahidehpour** and Y. Wang, Communication and Control of Electric Power Systems, John Wiley and Sons, June 2003
5. M. **Shahidehpour**, Z. Li and Y. Fu, Energy System Control and Operation, John Wiley and Sons, 2017
6. **M. Shahidehpour** and L. Wu, Stochastic Methods in Electric Power Systems, John Wiley and Sons, 2017

PATENT

P. Ristanovic, M. Bjelogric, J. Frame, M. Aganagic, and M. **Shahidehpour**, "Exchange, Scheduling and Control System for Electrical Power," Patent #7343360, Issued on March 11, 2008.

INVITED TALKS AT EDUCATIONAL INSTITUTIONS AND INDUSTRY

Keynote Speeches

1. International Conference on New Energy and Environmental Engineering, Cairo, Egypt (2016)
2. IEEE International Conference on Smart Energy Grid Engineering, Oshawa, Canada (2015)
3. IEEE Smart Grid Conference, Tehran, Iran (2015)
4. Workshop on Power Systems and Markets, Pennsylvania State University, State College (2015)
5. IEEE India International Conference INDICON, New Delhi, India (2015)
6. IEEE International Conference on HONET-ICT, Islamabad, Pakistan (2015)
7. IEEE International Workshop on Integrated Power Packaging, Chicago (2015)
8. IEEE International Conference on Direct Current Microgrids, Atlanta (2015)
9. 2015 ICEE, Sharif University of Technology, Iran (2015)
10. IEEE Smart Grid Conference, Tehran, Iran (2014)
11. Australian Universities Power Engineering Conference, Pert, Australia (2014)
12. International Smart Grid Conference (ISGC&E 2013), Jeju Island, South Korea (2014)
13. Innovative Smart Grid Technologies Conference (ISGT Asia 2013), Bangalore, India (2013)
14. Smart Electrical Grid Technology Conference, University of Science and Technology, Iran (2012)
15. Advancing Wind Power in Illinois Annual Conference, Normal, Illinois (2012)
16. Smart Grid Roadmap, Energy Efficiency Organization, Tehran, Iran (2012)
17. IEEE ISGT Conference-Australia, Perth, Australia (2011)
18. 2011 IEEE ISGT Conference-Middle East, Jeddah, Saudi Arabia (2011)
19. Fourth DRPT Conference, Shandong University, China (2011)
20. 2011 ICEE Conference, Amirkabir University, Tehran, Iran (2011)
21. 2010 ISGT Conference, Chalmers University, Gothenburg, Sweden (2010)
22. 2010 PMAPS Conference, Singapore (2010)
23. Third Brazilian Symposium on Electrical Power Systems, Belem, Brazil (2010)
24. 41st Energy Information Dissemination Program, Oklahoma State University (2010)
25. 2010 ICEE, Isfahan University of Technology, Iran (2010)
26. 2009 Meeting of Italian Federation of Electrical Engineers, Catania (2009)
27. 2009 Asia T&D Conference, Seoul, South Korea (2009)
28. 2009 PowerTech Conference, Bucharest, Romania (2009)
29. 2008 Power System Conference, Tehran, Iran (2008)
30. Industrial & Commercial Use of Energy Conference, Cape Town, South Africa (2007)
31. National Power Engineering Conference, Malaysia (2003)

Sponsored Talks and Colloquia

1. University of Los Andes, Bogota, Colombia (2016)
2. Future University of Egypt, Cairo (2016)
3. King Abdulaziz University, Jeddah, Saudi Arabia (2016)
4. University of North Carolina, Charlotte (2016)
5. Illinois Commerce Commission Meeting on Smart Cities (2016)
6. University of Utah (2016)
7. Tsinghua University, Beijing China (2015)

8. National University of Science and Technology, Islamabad, Pakistan (2015)
9. Sharif University of Technology, Tehran, Iran (2015)
10. Jamia Millia Islamia, New Delhi, India (2015)
11. Orumieh University, Orumieh, Iran (2015
12. King Abdulaziz University, Jeddah, Saudi Arabia (2015)
13. Kashan University, Kashan, Iran (2015)
14. Xian Jiaotong University, Xian China (2015)
15. Middle East Technical University, Turkey (2015)
16. Workshop on Empowering Customers and Cities, Chicago (2015)
17. Hunan University, Chengsha, China (2015)
18. Southeast University, Nanjing, China (2015)
19. Massachusetts Institute of Technology, Boston (2015)
20. Florida International University, Miami (2015)
21. Fourah Bay College, Sierra Leone, Africa (2015)
22. University of Kashan, Iran (2015)
23. Young Professionals in Energy (Burns & McDonnell Summit), Chicago (2015)
24. University of Tabriz, Iran (2015)
25. Azerbaijan Regional Power Authority, Iran (2015)
26. Microgrid Global Summit, California (2015)
27. OATI Energy Conference, Las Vegas (2014)
28. IEEE Smart Grid Conference, Tehran, Iran (2014)
29. University of Maryland, Institute for Systems Research (2014)
30. Southern Methodist University, Dallas (2014)
31. Energy and Environment Protection Hearing, Legislature of the U.S. Virgin Islands (2014)
32. Gas Power Symposium, Chicago (2014)
33. Microgrid Global Summit, Newport Beach, California (2014)
34. DOE Sunshot Grand Challenge Summit, Anaheim, California (2014)
35. Emerge Mayoral Summit, Miami (2014)
36. Clarkson University, Potsdam, New York (2014)
37. Natural Gas Power Generation Conference, Chicago, (2014)
38. OSIsoft Summit, San Francisco (2014)
39. University of Denver (2014)
40. Denmark Technical University, Copenhagen (2013)
41. University of Calgary, Canada (2013)
42. Kerman University, Iran (2013)
43. Wind Powering America, Chicago (2013)
44. Columbia University, Earth Institute, New York (2013)
45. Virginia Tech, Advanced Research Institute (2013)
46. Tsinghua University, Beijing, China (2013)
47. Northwestern University, Evanston, Illinois (2013)
48. King Abdulaziz University, Jeddah, Saudi Arabia (2013)

49. University of Texas-Dallas (2013)
50. S&C Electric Company, Chicago, Illinois (2013)
51. Sharif University of Technology, Tehran, Iran (2012)
52. Schneider Electric Meeting on Smart Grid, Paris (2012)
53. Illinois Solar Energy Association, Chicago (2012)
54. Eaton Corporation Centennial Meeting, Chicago (2012)
55. University of Texas at Arlington (2012)
56. King Abdulaziz University, Jeddah, Saudi Arabia (2012)
57. Annual Meeting of Electrical Engineering Department Head Association, Austin (2012)
58. PJM Interconnection (2012)
59. Sharif University of Technology, Tehran, Iran (2011)
60. King Abdulaziz University, Jeddah, Saudi Arabia (2011)
61. K.N. Toosi University, Tehran, Iran (2011)
62. Cigre Conference on Electric Power System of Future, University of Bologna, Italy (2011)
63. Tianjin University, Tianjin, China (2011)
64. Annual Meeting of Electrical Engineering Department Head Association, Phoenix (2011)
65. University of Nevada, Reno (2011)
66. Illinois Science & Technology Coalition Meeting at the U.S. Capitol, Washington, DC (2011)
67. U.S. Department of Energy Workshop on Workforce Development, Washington, DC (2011)
68. National Renewable Energy Laboratory, Boulder (2011)
69. Achievement Rewards for College Scientists (ARC) Foundation, Chicago (2011)
70. Stuart School of Business, IIT, Chicago (2011)
71. IIT Alumni Association, Anaheim (2011)
72. Petroleum Institute, Abu Dhabi (2010)
73. Korea University, Seoul (2010)
74. KEPCO Electric Power Research Institute, Daejeon, South Korea (2010)
75. 2010 Nebraska Research and Innovation Conference, Lincoln, Nebraska (2010)
76. 2010 EEI Transmission and Distribution Conference, Denver (2010)
77. Chalmers University, Sweden (2010)
78. Federal University of Para, Belem, Brazil (2010)
79. Oklahoma State University (2010)
80. IEEE Chicago Section (2010)
81. Isfahan University of Technology, Iran (2010)
82. Sharif University of Technology, Iran (2010)
83. Nanyang Technological University, Singapore (2010)
84. National Seoul University, South Korea (2009)
85. University of Bologna, Italy (2009)
86. British Columbia Hydro, Canada (2009)
87. Polytechnic University of Bucharest, Romania (2009)
88. University of São Paulo, San Carlos, Brazil (2008)
89. Federal University do Rio Grande do Sul, Porte Alegre, Brazil (2008)

90. Pontifical Catholic University, Porte Alegre, Brazil (2008)
91. Tehran University, Iran (2008)
92. Sharif University of Technology, Iran (2008)
93. Cape Peninsula University of Technology, Cape Town South Africa (2008)
94. University of the Witwatersrand, Johannesburg, South Africa (2008)
95. Regulatory Authority for Energy, Athens, Greece, (2007)
96. American Transmission Company, Wisconsin (2007)
97. Electricity Engineers Association of New Zealand, Auckland (2007)
98. University of Auckland, New Zealand (2007)
99. Transpower New Zealand, Ltd, Wellington, New Zealand (2007)
100. Citadel Group, Illinois (2007)
101. American Transmission Company, Wisconsin (2006)
102. University of Waterloo, Canada (2006)
103. Sharif University of Technology, Iran, (2006)
104. Korea Power Exchange, Seoul (2006)
105. IEEE India Power Conference, Delhi (2006)
106. IEEE Qatar Section, Qatar (2006)
107. IEEE Dhahran Section, Saudi Arabia (2006)
108. King Fahd University of Petroleum and Minerals, Saudi Arabia (2006)
109. Polytechnic University of Tehran, Iran (2006)
110. Grid Management Corporation, Iran (2006)
111. Istanbul Technical University, Turkey (2005)
112. Mohandes Society, Toronto, Canada (2005)
113. University College Dublin (2005)
114. University of London, U.K. (2005)
115. Technical University of Bucharest, Romania (2005)
116. IEEE Chicago Section of PES, Chicago (2005)
117. IEEE Fox Valley Section, Illinois (2004)
118. University of Engineering and Technology, Lahore, Pakistan (2004)
119. Central Electricity Authority HQ, Delhi, India (2004)
120. Indian Institute of Technology, Madras, India (2004)
121. Federation of Andhra Pradesh Chambers of Commerce, Hyderabad, India (2004)
122. Jadavpur University, Calcutta, India (2004)
123. National Power Engineering Conference (keynote Speaker), Malaysia (2003)
124. American University of Beirut, Lebanon (2003)
125. Nexant Corporation, Arizona (2003)
126. OM Corporation, California (2003)
127. California ISO, Sacramento (2003)
128. American Transmission Company, Wisconsin (2003)
129. Sargent and Lundy Corporation, Illinois (2003)
130. Pars Corporation, California (2003)

131. North China Electric Power University, Beijing (2003)
132. Kolej Universiti Teknikal Kebangsaan Maleka, Malaysia (2003)
133. Exelon Corporation, Illinois (2002)
134. Yarmouk University, Jordan (2002)
135. Energy Transmission Company, Jordan (2002)
136. North China Electric Power University, China (2002)
137. Tsinghua University, China (2002)
138. Electric Power Research Institute, China (2002)
139. Tehran University, Iran (2002)
140. Energy Research Center, Ministry of Energy, Iran (2001)
141. Sharif University, Tehran, Iran (2001)
142. Ferdowsi University, Iran (2000)
143. Michigan Technological University (2000)
144. Southern Illinois University (2000)
145. OATI Corporation, Minnesota (1999)
146. Argonne National Laboratory, Illinois (1998)
147. University of Missouri-Rolla, Missouri (1997)
148. San Juan University, Argentina (1996)
149. Commonwealth Edison Company, Illinois (1995)
150. Marquette University, Wisconsin (1994)

EDITORIAL BOARD MEMBERSHIP

- IEEE Power and Energy Society (Vice President of Publications, 2008-2011)
- IEEE Transactions on Smart Grid (Founding Editor-in-Chief, 2009-2014)
- IEEE Transactions on Power Systems (Topical Editor, 1995-2008)
- IEEE Transactions on Systems, Man and Cybernetics (Topical Editor, 1997-2000)
- IEEE Power Engineering Letters (Topical Editor, 1997-2008)
- IEEE Access Journal (Topical Editor, 2013-2015)
- IEEE Electrification Magazine (Topical Editor, 2013-present)
- IEEE Power and Energy Magazine (Topical Editor, 2002-present)
- IEEE CAP Magazine (Topical Editor, 1998-2002)
- IEEE Transaction on Power Systems (Guest Editor, 2003)
- IEEE Electrification Magazine (Guest Editor, 2015, 2014)
- IEEE Power and Energy Magazine (Guest Editor, 2014, 2008, 2007, 2006, 2005, 2004)
- IEEE Proceedings (Guest Editor, 2006, 2005)
- International Journal of Electrical Power and Energy Systems (Topical Editor, 2016-present)
- Marcel Dekker Book Series in Power Systems (Topical Editor, 2000-2002)
- Electricity Journal (Topical Editor, 2009-present)
- Wiley Encyclopedia of Electrical and Electronics Engineering (Topical Editor, 2011-2013)
- Korean IEE Journal of Power Engineering (Topical Editor, 2004-present)
- International Journal of Emerging Electric Power (Topical Editor, 2004-present)
- Journal of Modern Power Systems and Clean Energy (Member of the Editorial Board, 2013-present)
- Energy Systems Journal (Member of the Editorial Board, 2009-present)
- HKN Bridge Magazine (Member of the Editorial Board, 2000-2002)
- Journal of Electric Power Systems Research (Member of the Editorial Board, 1997-2009)
- Journal of Electrical Eng. of University of Tabriz (Member of the Editorial Board, 2016-present)
- Journal of Electric Machines and Power Systems (Member of the Editorial Board, 1996-2000)
- CSEE (China) Journal of Power and Energy Systems (Guest Editor, 2016)
- Electricity Journal (Guest Editor, 2012)
- Journal of Electric Power System Research Journal (Guest Editor, 2013)

RESEARCH AND DEVELOPMENT GRANTS AND CONTRACTS

1. Ready, Set, Smart Communities, ($480,000), Illinois Science and Energy Innovation Foundation, 2014-2015 (PI)
2. Microgrid-Integrated Solar-Storage Technology, $8,000,000, DOE, (2015-2016), (PI)
3. Illinois State Planning Roadmap, ($300,000), DOE, 2015-2016, (PI)
4. Market Mechanism for Managing Uncertainties Caused by High Levels of Renewable Generation, ($300,000), NSF, 2015-2016, (Co-PI)
5. Battery Development for the DC Nanogrid, ($100,000) Illinois Clean Energy Community Foundation, 2015, (PI)
6. Design of a Bilevel Model for Analyzing Coordinated Cyber-Physical Attacks on the Electric Power System Infrastructure, $60,000, King Abdulaziz University, 2015 (Co-PI)
7. A Resilient Self-Healing Cyber Security Framework for Power Grid, ($1,200,000), DOE, 2014-2016, (Co-PI)
8. DC Microgrid Research and Implementation, ($320,000), DOE with cost share provided by ComEd, 2014, (PI)
9. Research, Development, and Testing of a Master Controller with Applications to the Bronzeville Community Microgrid System, ($1,200,000), DOE, 2014-2016, (Co-PI)
10. Microgrids for Economics and Resiliency of the Grid Enterprise, $330,000, King Abdulaziz City for Science and Technology, 2014-2016, (Co-PI)
11. Wireless Networked Communication and Control System for Smart Traffic Lights in Smart Cities, ($50,000), ComEd, 2015 (PI)
12. A World-Class Smart Grid Education and Workforce Training Center, ($12,600,000 total), DOE, 2010-2014, (PI)
13. Perfect Power System at IIT, ($12,000,000 total), DOE, 2008-2014 (PI)
14. Grid Resilience Implementation, ($1,900,000), OSIsoft Corporation, 2014 (PI)
15. Wireless Sensors for Grid resilience, (20,000), ComEd, 2014 (PI)
16. Security-Constrained Co-optimization Planning Algorithm for Electricity and Natural Gas Transportation Infrastructures, $60,000, King Abdulaziz University, 2014 (Co-PI)
17. Next-Generation Expansion Planning Tool for Electric Power Systems, $330,000, King Abdulaziz City for Science and Technology, 2014-2016, (Co-PI)
18. Application of the Energy Zones Mapping Tool, $100,000, National Association of Regulatory Utility Commissioners (NARUC), 2014 (PI)
19. Integrated Model of Electric Power and Natural Gas Transmission Systems for Enhancing the Infrastructure Security in Saudi Arabia, $60,000, King Abdulaziz University, 2013 (Co-PI)
20. Long-term Load Forecasting, $200,000, NARUC, 2014 (Co-PI)
21. Long-term Electric and Natural Gas Infrastructure Requirements in the Eastern Interconnection, $220,000, NARUC, 2013-2014 (Co-PI)
22. Co-Optimization Planning of Transmission and Generation in the Eastern Interconnection, $220,000, NARUC, 2012-2013 (Co-PI)
23. Illinois Smart Solar Initiative, $220,000, Illinois Department of Commerce and Economic Opportunity, 2012-2013, (PI)
24. Charging Stations for Microgrid, $289,965, Eaton Corporation, 2012 (PI)
25. Smart Grid Center Technology, $411,881, S&C Electric Company, 2012 (PI)

26. Stochastic Optimization and Coordination Control of Demand Response for Enhancing the Secure and Economic Operation of Power Systems, $300,000, National Science Foundation, 2011-2013, (Co-PI)
27. Battery and Charging Stations for Perfect Power System, ($1,000,000 total), DOE, 2011-2012 (PI)
28. A World-Class University-Industry Consortium for Wind Energy Research, Education, and Workforce Development, ($9,000,000 total), DOE, 2010-2013 (PI)
29. Illinois Smart Grid Regional Innovation Cluster, $1,300,000, Small Business Administration (SBA), 2010-2012 (Co-PI)
30. Local Area Monitoring System (LAMS) for Microgrid, $400,000, KERI, 2011-2013 (Co-PI)
31. Stochastic Optimization and Coordination Control of Demand Response for Enhancing the Secure and Economic Operation of Power Systems, $300,000, NSF, 2011-2014, (Co-PI)
32. Power Engineering Research and Education, $5000,000, Grainger Foundation, 2007-2012 (PI)
33. Wind Integration in the U.S. Eastern Interconnection, $750,000, DOE, 2009-2010 (PI)
34. Coordination of Renewable Hydro-Wind Units for Enhancing the Hydrothermal Power System Operation, $350,000, National Science Foundation, 2008-2011 (Co-PI)
35. Security-Constrained Optimal Coordination of Generation and Transmission Maintenance Outage Scheduling, $300,000, National Science Foundation, 2007-2010 (Co-PI)
36. Electricity Supply and Demand Analysis Model, Korea Power Exchange, $130,000, 2007-2009 (PI)
37. Electrical Engineering Laboratory Development, $80,000, Elite Electronics, 2006 (PI)
38. Wind Energy Technology Development in Illinois, $50,000, Invenergy Corp, 2006 (PI)
39. Technical and Market Integration of Small Hydro Development, $50,000, Orenco Corp. 2006 (PI)
40. Electrical Engineering Laboratory Development, $400,000, Cherry Electronics, 2006 (PI)
41. Electrical Engineering Laboratory Development, $500,000, Zebra Technology, 2005-2006 (PI)
42. Security Constrained Maintenance Scheduling, $1,000,000, Siemens Corporation, 2006-2008 (PI)
43. Unit Commitment with AC Constraints, $700,000, Nexant Corporation, 2004-2005 (PI)
44. Power Engineering Research, $500,000, Grainger Foundation, 2004 (PI)
45. A Novel Approach for Improving Power Electronics and Electric Drives Curriculum, $400,000, NSF, 2003 (Co-PI)
46. Leader Follower for Power Market Operations, $150,000, NSF, 2003 (Co-PI)
47. PV-Battery System for Transmission Management, $120,000, DOE, 2003 (PI)
48. Probabilistic Risk Evaluation of Transmission Systems, $70,000, ComEd, 2002 (PI)
49. Virtual Counseling in Illinois High Schools, $50,000, Illinois Board of Higher Ed, 2001 (PI)
50. Power Engineering Innovations, $500,000, Grainger Foundation, (was matched by IIT for a total of $1,000,000), 2000-2001 (PI)
51. Distributed Control of Power Systems, $250,000, ONR, 1999 (Co-PI)
52. Illinois State Matching Grant Program, $43,000, Illinois Board of Higher Education, 1999 (PI)
53. Power Engineering Laboratory Research, $200,000, ComEd, 1998 (PI)
54. Interactive Risk-Based Planning for Dynamic Contingencies, $150,000, EPRI, 1998 (Co-PI)
55. A Multi-Agent Approach to Feeder Reconfiguration, $50,000, NSF, 1998 (Co-PI)
56. Grainger Power Engineering Laboratory at IIT, $200,000, Grainger Foundation, 1997 (PI)
57. Derivatives and Generation Business Opportunities, $32,000, EPRI, 1997 (Co-PI)
58. A WWW ALN for the Utility Industry, $30,000, Sloan Foundation, 1997
59. Knowbots for Internet-Based Combat Training, $125,892, ARO, 1996 (Co-PI)

60. Application of Game Theory to Power Systems, $43,500, Siemens Corporation, 1996 (PI)
61. Real-Time Control and Operation of Electric Power Systems, $155,000, DOE, 1995 (PI)
62. A Massively Parallel Population-Based Approach to Operations Scheduling, $72,687, NSF, 1995 (PI)
63. Application of Fuzzy Set Theory to Security Constrained Optimal Reactive Power Control in a Multi-Area, $49,000, NSF, 1994 (PI)
64. Railroad Transportation Curriculum Development for Enhancing the U.S. Infrastructure, $180,000, NSF, 1993 (Co-PI)
65. Resource Scheduling and Commitment, $25,000, Commonwealth Edison Company, 1993 (PI)
66. Special Machine Design, $20,000, C.E. Neihoff Corporation, 1991 (Co-PI)
67. Electric Power Distribution Innovation, $20,000, Commonwealth Edison Company, 1991 (PI)
68. Application of Fuzzy Logic to Power Plant Scheduling, $7,500, TCC, 1991 (PI)
69. Application of Artificial Neural Networks in Multi-Area Generation Scheduling with Fuzzy Data, $60,400, EPRI, 1990 (PI)
70. Scheduling of Power Interchange Between Interconnected Utilities, $9,600, TCC, 1990 (PI)
71. Application of Expert Systems to Generation Control and Scheduling in Large Power Plants, $24,000, TCC, 1989 (PI)
72. Expert System for Operational Scheduling and Generation Control, $49,200, EPRI, 1988 (PI)
73. Application of Expert Systems to Operational Reliability Analysis in a Large Plant, $10,000, ERIF, 1987 (PI)
74. Surge Protection of Underground Distribution Systems, $22,500, Commonwealth Edison Company, 1986 (PI)

INDUSTRIAL CONSULTING ACTIVITIES

- Global Energy Market Solutions, Naperville, IL, 2003-present (President)
- Veriown Energy, Chicago, IL, 2014-present (Microgrid Development Studies and Implementation)
- Willdan Energy, Anaheim, CA, 2015-present (Microgrid Development Studies and Implementation)
- Adica, Downers Grove, IL, 2010-2014 (Illinois Power Agency Studies, Smart Homes)
- American Wind Connection, CA, 2011-2013 (Offshore Wind Integration Studies, HVDC Modeling)
- TransElect, Chicago, IL, 2008-2012 (Wind Power Integration Planning)
- Acciona, Chicago, IL, 2008-2011 (Wind Power Integration Planning)
- Korea Power Exchange, Korea, 2007-2009 (Power System Planning)
- American Transmission Company, Waukesha, WI, 2006-2008 (Optimal Transmission Scheduling)
- LCG Consulting, Los Altos, CA, 2007-2009 (Security-Constrained Unit Commitment for Greece)
- Siemens Energy, Minneapolis, MN, 1994-2008 (Security-Constrained Unit Commitment)
- New England ISO, Holyoke, MA, 2006-2007 (Optimal Transmission Maintenance Scheduling)
- Nexant Corporation, San Francisco, CA, 2003-2006 (Day-ahead Commitment with AC Network)
- Exelon Corporation, Chicago, IL, 1990-2002 (Transmission Risk Analysis)
- KEMA Consulting, Fairfax, VA, 2001 (Evaluation of commercial software capabilities)
- Open Access Technology International, Inc., 2000 (Firm Transmission Right Studies)

GRADUATE RESEARCH STUDENTS AND VISITING SCHOLARS

(126 scholars including 54 PhD and 31 master's degree students, and 41 visiting professors)

Ph.D. Students (Date of graduation is given in parenthesis)

1. Zhiyi Li (ongoing)
2. Xiaping Zhang (2015) Operation and Planning of Coordinated Natural Gas and Electricity
3. Liang Che (2015) Microgrids: Control, Operation, Coordination and Planning
4. Mehdi Ganji (2015) Optimal Load Scheduling in Commercial and Residential Microgrids
5. M. Khodayar (2012) Coordination of Storage with Renewable Energy Resources
6. K. Aflaki (2012) Integration of Sustainable Energy in the Western Interconnection
7. M. Ghamdi (2012) Incorporating Reactive Power Market into the Day-Ahead Market
8. W. Tian (2011) Large-Scale Wind Integration in the Eastern Interconnection
9. A. Khodaei (2010) Transmission Switching in Power System Operation and Planning
10. S. Bahramirad (2010) Design and Implementation of Hydrokinetic Run-of-River Turbines
11. S. Kamalinia (2010) Expansion Planning of Fast-Response Units for Wind Integration
12. C. Liu (2010) Interdependency of Gas and Electricity in Restructured Power Systems
13. A. Lotfju (2009) DC Transmission System Integration for Enhancing Deliverability
14. L. Wu (2008) Stochastic Security-Constrained Unit Commitment
15. L. Abreu (2008) Wind Energy Coordination and Control
16. J. Roh (2008) Power System Planning in Restructured Power Systems
17. J. Wang (2007) Market Design Tools in Restructured Power Systems
18. H. Daneshi (2006) Market Simulation in Electric Power Systems
19. Y. Fu (2006) Security-Constrained Operational Planning in Power Systems
20. T. Li (2006) Competition and Risk Management in Power Markets
21. B. Lu (2004) SCUC with Flexible Operating Conditions
22. Z. Li (2002) Asset Valuation and Risk Analysis in Electric Power Systems
23. H. Yamin (2001) Options for Pricing Ancillary Services in a Deregulated System
24. M. Alomoush (1999) Auctionable Fixed Transmission Rights for Congestion Management
25. E. Rezania (1998) Contingency Constrained Available Transfer Capability Calculations
26. J. Kavicky (1997) Application of Parallel Path in Transmission Open Access
27. M. Marwali (1997) Coordinated Transmission and Generation Maintenance Scheduling
28. H. Ma (1997) Decomposition Techniques for AC Unit Commitment
29. R. Ferrero (1997) Game Theory Applications to Deregulated Power System Operation
30. K. Abdul-Rahman (1994) Applications of Fuzzy Sets to Power Systems Operation and Planning
31. C. Wang (1992) Generation Scheduling of Hydro-Thermal Systems with Uncertain Data
32. C. Nwankpa (1990) Stochastic Models for Power System Dynamic Stability Analysis
33. Z. Ouyang (1990) Artificial Intelligence for Short Term Power Generation Scheduling
34. N. Deeb (1989) Decomposition Approach to Optimal Reactive Power Dispatch
35. S. Tong (1989) Generation Scheduling in Large Scale Hydro Thermal Power Systems
36. N. Abbasy (1988) Optimal Set of Measurements for Estimation of System States
37. S. Shah (1988) Expert Systems Application to Power Network Security Analysis
38. J. Qiu (1987) Effect of Random Perturbations on Power Systems Reliability Evaluation

39. J. Banda (1985) Surge Protection in Underground Distribution Systems

Joint PhD Students with Other Universities

40. C. Shao, Xian Jiaotong University, China (2016)
41. Y. Wang, Zhejiang University, China (2015)
42. X. Zhong, Hunan University, China (2015)
43. Y. Kabiri, Sharif University of Technology, Iran (2015)
44. Z. Li, Tsinghua University, China (2015)
45. X. Shen, Tsinghua University, China (2014)
46. G. Haddadian, Stuart School of Business, IIT (2014)
47. M. Parvania, Sharif University of Technology, Iran (2013)
48. M. Albaijat, University of California Davis, USA (2012)
49. P. Maghouli, Sharif University of Technology, Iran (2011)
50. Farrokh Aminifar, Sharif University of Technology, Iran (2010)
51. A. Rajabi-Ghahnavieh, Sharif University of Technology, Iran (2010)
52. C. Sahin, Middle East Technical University, Turkey (2009)
53. O. Tor, Middle East Technical University, Turkey (2005)
54. R. Ferrero, University of San Juan, Argentina (1996)

Visiting Faculty and Post-doctoral Scholars

1. Professor X. Liu, Jinan University, China (2014-2015), Protection Systems for Microgrids
2. Professor Camilo Andrés Cortés, National University of Colombia (2015), Microgrids
3. Professor Bin Zhou, Hunan University (2015), Optimization Methods
4. Professor R. Jiao, North China Electric Power University (2015-2016), Power System Planning
5. Professor J. Wei, North China Electric Power University, China, (2014-2015), Smart Grid
6. Professor Z. Bie, Xi'an Jiaotong University, China (2014), Microgrids
7. Dr. M. Khodayar, GEMS Corporation (2012-2014), Power System Operation
8. Professor Q. Yan, North China Electric Power University, China (2011-2012), Electric Vehicles
9. Professor K. Nikravesh, Amirkabir University, Iran (2011-2012), Power System Stability
10. Professor K. Li, Hebei University of Technology, China (2011-2012), Microgrid Design
11. Dr. W. Tian, GEMS Corporation (2011-2014), Large Scale Wind Integration
12. Dr. A. Khodaei, GEMS Corporation (2011-2012), Power System Planning
13. Dr. H. Wu, Xian Jiaotong University, China (2011-2013), Demand Response Studies
14. Professor J. Shu, China Electric Power University, China (2009-2010): Power System Planning
15. Professor Z. Tan, North China Electric Power University, (2008-2009): Market Economics
16. Professor M. Pantos, University of Ljubljana, Slovenia (2008-2009): Power System Planning
17. Professor Y.H. Song, University of Liverpool, England (2008-2009): Computational Intelligence
18. Professor J. Liu, Sichuan University, China (2008-2009): Market Operation in China
19. Dr. T.K. Hahn, Kyungwon University, Korea (2008-2010): Market Operation in Korea
20. Dr. C. Sahin, Middle East Technical University, Turkey (2008-2009): Energy Interdependencies
21. Dr. F. Aminifar, Sharif University, Iran (2009-2010): Reliability Evaluation of PMUs

22. Professor J. Choi, Gyeongsang National University, Korea (2007-2009): Power System Planning
23. Professor J. Mantovani, Sao Paulo State University, Brazil (2006-2007): Power System Operation
24. Dr. Y. Fu, GEMS Corporation, (2006-2007) Outage Management in Electricity Markets
25. Dr. T. Li, GEMS Corporation, (2006-2007): Strategic Bidding in Electricity Markets
26. Dr. O. Tor, Middle East Technical University, Turkey (2004-2005): Restructuring Models for Turkey
27. Dr. H. Kim, Pusan University, Korea (2004-2006): Simultaneous Auction of Energy
28. Dr. Z. Li, GEMS Corporation, (2002-2003): Probabilistic Transmission Risk Analysis
29. Dr. Y. Wang, Tianjin University, China (1999-2003): Distributed Energy Management Systems
30. Dr. H. Shanechi, Ferdowsi University, Iran, (2001-2002): Distributed Generation Technologies
31. Dr. M. Alomoush, Yarmouk University, Jordan, (1999-2000): Supervisory Control of Power System
32. Dr. M. Marwali, Agency for the Assessment and Application of Technology, Indonesia, (1998): Reliability-Centered Maintenance Scheduling in Deregulated Power Systems
33. Dr. X. Wang, Harbin Institute of Technology, China (1995-1996): Power Systems Voltage Stability
34. Dr. R. Ferrero, University of San Juan, Argentina (1994-1996): Game Theory Applications
35. Prof. S. Zhu, Tsinghua University, China (1994-1995): Power Plants Control and Operation
36. Dr. X. Bai, Electric Power Research Institute, China (1994-1995): Hydro-thermal Power Systems
37. Dr. K. Abdul-Rahman, Siemens (1993-1994): Energy Economics
38. Dr. I. Roytelman, Kiev Research and Design Institute, (1992-1993): Power Distribution Automation
39. Prof. M. Pourkermani, Sharif University of Technology (1991-1992): Special Purpose Machines
40. Dr. S. Li, Research Institute of Electric Light Source, China (1990-1991): SCADA in Power Systems
41. Prof. S. Sun, Tsinghua University, China (1986-1989): Power Systems Planning

M.S. Thesis Students (Date of graduation is given in parenthesis)

1.	R. Al-Hassan (2016)	Intelligent Traffic Management
2.	H. Al-Hassan (2015)	Stochastic Modeling of Day-ahead Scheduling
3.	L. Che (2013)	Microgrid Control
4.	S. Ahmadinejad (2013)	Wind Energy Integration
5.	K. Vyas (2013)	Assessment of Microgrids for Developed and Developing Countries
6.	J. Camprubi (2011)	Sustainable Stadiums
7.	H. Noohi (2010)	Wind Integration in the Eastern Interconnection
8.	B. Noohi (2009)	Cyber Security issues in Power Systems
9.	S. Duggirala (2006)	Transmission Planning in Restructured Power Systems
10.	A. Khan (2006)	Wind Speed Forecasting using Wavelets
11.	V. Ellia (2005)	Agents in Electric Power System Operation
12.	D. Patil (2005)	Design of Batteries for Electric Cars
13.	J. Bui (2005)	Hydrogen Economy
14.	M. Phadke (2004)	Equivalent Energy Function Approach to Photovoltaic-Utility Systems
15.	A. Koshi (2004)	Superconductors in Electric Power Systems
16.	N. Sriram (2004)	Biomass in Electric Power Systems
17.	A. Joseph (2004)	Battery and Storage in Electric Power Systems
18.	S. Kullanthasamy (2004)	Asset Management in Power Systems

19. S. Sood, (2004) Power Generation at Brownfields
20. S. Sheth (2004) Geothermal Energy in Power Systems
21. R. Pegallapati (2004) Small Hydro as Green Power
22. P. Ganesan (2003) Transmission Management in Restructured Power Systems
23. G. Ponnuvel (2003) Impact of Losses on Transmission Pricing
24. A. Eybalin (2002) Restructuring Models for European Countries
25. M. Albaijat (1999) Optimal Power Flow Calculation with Evolutionary Programming
26. N. Maricar (1998) Object Oriented Programming Approach to Power System Visualization
27. D. Mardijino (1998) Application of Artificial Neural Networks to Short-Term Load Forecasting
28. M. Marwali (1994) Fuzzy Least Median Square Estimator in Power Systems
29. M. Yesiloglu (1993) Adaptive Control of Nonlinear Systems by Artificial Neural Networks
30. K. Labudda (1992) Fuzzy Linear Programming Approach to Power System State Estimation
31. J. Qiu (1985) A New Approach to Power Loss Minimization

TECHNICAL PUBLICATIONS

(This list represents 458 publications including 282 journal papers and 176 conference papers, journal correspondence, and technical reports)

Journal Publications

1. Y. Fu, C. Wang, W. Tian, and M. **Shahidehpour**, "Integration of Large-Scale Offshore Wind Energy via VSC-HVDC in Day-ahead Scheduling," IEEE Transaction on Sustainable Energy, 2016

2. Y. Wang, C. Liu, M. **Shahidehpour**, and C. Guo "Critical Components for Outage Management Considering Weather Conditions and Common Mode Outages in Reconfigurable Distribution Systems," IEEE Transaction on Smart Grid, 2016

3. Amin Khodaei and M. **Shahidehpour**, "Market-based vs. Price-based Microgrid Optimal Scheduling," IEEE Transaction on Smart Grid, 2016

4. Z. Li, M. **Shahidehpour**, W. Wu, B. Zeng, and B. Zhang, "Decentralized Contingency-Constrained Tie-Line Scheduling for Multi-Area Power Grids, IEEE Transaction on Power Systems, 2016

5. X. Liu, M. **Shahidehpour**, Z. Li, X. Liu, Y. Cao, Z. Li, ":Power System Risk Assessment in Cyber Attacks Considering the Role of Protection Systems," IEEE Transaction on Smart Grid, 2016

6. Y. Wang, Z. Li, M. **Shahidehpour**, L. Wu, and C. Guo, "Stochastic Co-optimization of Midterm and Short-term Maintenance Outage Scheduling Considering Covariates in Power Systems," IEEE Transaction on Power Systems, 2016

7. Z. Li, M. **Shahidehpour**, S. Bahramirad, A. Khodaei, "Optimizing Traffic Signal Settings in Smart Cities," IEEE Transaction on Smart Grid, 2016

8. X. Zhang, M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Reliability-based Optimal Planning of Electricity and Natural Gas Interconnections for Multiple Energy Hub," IEEE Transaction on Smart Grid, 2016

9. X. Zhang, M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Electricity-Natural Gas Operation Planning with Hourly Demand Response for Deployment of Flexible Ramping," IEEE Transactions on Sustainable Energy, 2016

10. L. Che, X. Zhang, M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Optimal Interconnection Planning of Community Microgrids with Renewable Energy Sources," IEEE Transaction on Smart Grid, 2016

11. Z. Li, W. Wu, M. **Shahidehpour**, B. Zhang, "Adaptive Robust Tie-line Scheduling Considering Wind Power Uncertainty for Interconnected Power Systems," IEEE Transaction on Power Systems, 2016

12. Y. Sun, Z. Lin, W. Tian, **M. Shahidehpour**, "A Lagrangian Decomposition Approach to Energy Storage Transportation Scheduling in Power Systems," IEEE Transaction on Power Systems, 2016

13. Z. Li, M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Bilevel Model for Analyzing Coordinated Cyber-Physical Attacks on Power Systems," IEEE Transaction on Smart Grid, 2016

14. A. Alabdulwahab, and A. Abusorrah, X. Zhang, M. **Shahidehpour**, "Stochastic Security-Constrained Scheduling of Coordinated Electricity and Natural Gas Infrastructure," IEEE Systems Journal, 2016

15. G. Haddadian, N. Khalili, M. Khodayar, and M. **Shahidehpour**, "Optimal Coordination of Variable Renewable Energy and Distributed Storage in Electric Vehicles for Energy Sustainability

Sustainable Energy, Grids and Networks," Sustainable Energy, Grids and Networks, Vol 6, pp. 14-24, June 2016

16. A. Gholami, F. Aminifar, and M. Shahidehpour, "Front Lines Against the Darkness: Enhancing the resilience of the electricity grid through microgrid facilities," IEEE Electrification Magazine, Vol. 4, No. 1, Mar. 2016

17. S. Zhang, Y. Mishra, and M. **Shahidehpour**, "Fuzzy-Logic Based Frequency Controller for Wind Farms Augmented With Energy Storage Systems," IEEE Transaction on Power Systems, Vol. 31, No. 2, pp. 1995-1603, Mar 2016

18. X. Zhang, M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Hourly Electricity Demand Response in the Stochastic Day-ahead Scheduling of Coordinated Electricity and Natural Gas Networks," IEEE Transaction on Power Systems, Vol. 31, No. 1, pp. 592-601, Jan. 2016

19. Z. Li, M. **Shahidehpour**, W. Wu, J. Wang, B. Zhang, "Combined Heat and Power Dispatch Considering Pipeline Energy Storage of District Heating Network," IEEE Transaction on Sustainable Energy, Vol. 7, No. 1, pp. 12-22, Jan. 2016

20. H. Wu and M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "A Game Theoretic Approach to Risk-based Optimal Bidding Strategies for Electric Vehicle Aggregators in Electricity Markets with Variable Wind Energy Resources," IEEE Transactions on Sustainable Energy, Vol. 7, No. 1, pp. 374-385, Jan. 2016

21. G. Haddadian, M. Khodayar, and M. **Shahidehpour,** "Accelerating the Global Adoption of Electric Vehicles – Barriers and Drivers," Electricity Journal, Vol. 28, No. 10, pp. 53-68, Dec. 2015

22. H. Wu and M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Thermal Generation Flexibility with Ramping Costs and Hourly Demand Response in Stochastic Security- Constrained Scheduling of Variable Energy Sources," IEEE Transaction on Power Systems, Vol. 30, No. 6, pp. 2955-2964, Nov. 2015

23. L. Che, M. **Shahidehpour**, A. Alabdulwahab, and Y. Al-Turki, "Hierarchical Coordination of a Community Microgrid with AC and DC Microgrids," IEEE Transaction on Smart Grid, Vol. 6, No. 6, pp. 3042-3051, Nov. 2015

24. X. Zhang, M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Security-Constrained Co-Optimization Planning of Electricity and Natural Gas Transportation Infrastructures," IEEE Transaction on Power Systems, Vol. 30, No. 6, pp. 2984-2993, Nov. 2015

25. Z. Li, M. **Shahidehpour**, W. Wu, B. Zeng, B. Zhang, and W. Zheng, "Decentralized Multi-Area Robust Generation Unit and Tie-Line Scheduling with Uncertain Wind Energy, IEEE Transaction on Sustainable Energy, Vol. 6, No. 4, pp. 1377-1388, Oct. 2015

26. X. Zhong, M. Peng, C. Tse, S. Guo, and M**. Shahidehpour**, "Analysis and Control of Multiple Chaotic Attractors from a Three-Dimensional System," Applied Mathematics and Computation, Vol. 268, No. 1, PP. 138–150, Oct. 2015

27. Y. Sun, Z. Li, M. **Shahidehpour**, and B. Ai, "Battery-based Energy Storage Transportation for Enhancing Power System Economics and Security," IEEE Transaction on Smart Grid, Vol. 6, No. 5, pp. 2395-2402, Sept. 2015

28. A. Khodaei, S. Bahramirad, and M. **Shahidehpour**, "Microgrid Planning Under Uncertainty," IEEE Transactions on Power Systems, Vol. 30, No. 5, pp. 2417-2425, Sept. 2015

29. X. Zhang, M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Optimal Expansion Planning of Energy Hub with Multiple energy Infrastructures," IEEE Transaction on Smart Grid, Vol. 6, No. 5, pp. 2302-2011, Sept. 2015

30. R. Das, V. Madani, F. Aminifar, J. McDonald, S. Venkata, D. Novosel, A. Bose, and M. **Shahidehpour**, "Distribution Automation Strategies: Challenges and Opportunities in a Changing Landscape," IEEE Transaction on Smart Grid, Vol. 6, No. 4, pp. 2157-2166, July 2015

31. R. Das, V. Madani, F. Aminifar, J. McDonald, S. Venkata, D. Novosel, A. Bose, and M. **Shahidehpour**, "Distribution Automation Strategies: Evolution of Technologies and the Business Case," IEEE Transaction on Smart Grid, Vol. 6, No. 4, pp. 2166-2175, July 2015

32. G. Haddadian, N. Khalili, M. Khodayar, and M. **Shahidehpour** "Optimal Scheduling of Distributed Battery Storage for Enhancing the Security and the Economics of Electric Power Systems with Emission Constraints," Electric Power System Research, Vol. 124, pp. 152–159, July 2015

33. M. **Shahidehpour**, C. Bartucci, N. Patel, T. Hulsebosch, P. Burgess, N. Buch, "Power Grid Resilience with Wireless Networked Communication and Control System for LED Streetlights in Smart Cities," IEEE Power and Energy Magazine, Vol. 13, No. 3, pp. 67-80, June 2015

34. G. Haddadian, N. Khalili, M. Khodayar, and M. **Shahidehpour** "Security-Constrained Power Generation Scheduling with Thermal Generating Units, Variable Energy Resources, and Electric Vehicle Storage for V2G Deployment," International Journal of Electrical Power and Energy Systems, No. 73, pp. 498–507, June 2015

35. W. Archibald, Z. Li, M. **Shahidehpour**, S. Johanns, and T. Levitsky, "Islands in the Sun: The solar Power Deployment Initiative at the University of the Virgin Islands," IEEE Electrification Magazine, Vol. 3, No. 1, pp. 56-67, Mar. 2015

36. X. Zhang, M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Coordination of Interdependent Natural Gas and Electricity Infrastructures for Firming the Variability of Wind Energy in Stochastic Day-ahead Scheduling " IEEE Transaction on Sustainable Energy, Vol. 6, No. 2, pp. 606-615, Apr. 2015

37. H. Wu and M. **Shahidehpour**, A. Alabdulwahab, and A. Abusorrah, "Demand Response Exchange in the Stochastic Day-Ahead Scheduling with Variable Renewable Generation, IEEE Transactions on Sustainable Energy, Vol. 6, No. 2, pp. 516-525, Apr. 2015

38. X. Liu, M. **Shahidehpour**, Y. Cao, Z. Li, and W. Tian, "Risk Assessment in Extreme Events Considering the Reliability of Protection Systems," IEEE Transactions on Smart Grid, Vol. 6, No. 2, pp. 1073-1081, Mar. 2015

39. G. Haddadian and M. **Shahidehpour**, "Ripple Effects of Shale Gas Boom in the United States– Shift in the Balance of Energy Resources, Technology Deployment, Climate Policies, Energy Markets, Geopolitics, and Policy Development," Electricity Journal, Vol. 22, No. 2, pp. 1-22, Mar. 2015

40. F. Aminifar, M. Fotuhi-Firuzabad, A. Safdarian, A. Davoudi, and M. **Shahidehpour,** "Synchrophasor Measurement Technology in Power Systems: Panorama and State-of-the-Art," IEEE Access, Vol. 2, pp. 1607-1628, Jan. 2015

41. C. Liu, C. Lee, and M. **Shahidehpour**, "Look Ahead Robust Scheduling of Wind-Thermal System With Considering Natural Gas Congestion," IEEE Transaction on Power Systems, Vol. 30, No. 1, pp. 544-545, Jan 2015

42. Z. Chen, L. Wu, and M. **Shahidehpour**, "Effective Load Carrying Capability Evaluation of Renewable Energy via Stochastic Long-Term Hourly-Based SCUC," IEEE Transactions on Sustainable Energy, Vol. 6, No. 1, pp. 187-197, Jan 2015

43. L. Wu and M. Shahidehpour, "A Hybrid Model for Integrated Day-ahead Electricity Price and Load Forecasting in Smart Grid," IET Journal of Generation Transmission and Distribution, Vol. 8, No. 12, pp. 1937–1950, Dec. 2014

44. M. Parvania, M. Fotuhi-Firuzabad, M. **Shahidehpour**, "ISO's Optimal Strategies for Scheduling the Hourly Demand Response in Day-ahead Markets," IEEE Transactions on Power Systems, Vol. 29, No. 6, pp. 2636-2645, Nov. 2014

45. S. Kamalinia, L. Wu, and M. **Shahidehpour**, "Sustainable Resource Planning in Energy Markets, Applied Energy, Vol. 133, No. 6, pp. 112-120, Nov. 2014

46. S. Kamalinia, L. Wu, and M. **Shahidehpour**, "Stochastic Midterm Coordination of Hydro and Natural Gas Flexibilities for Wind Energy Integration," IEEE Transactions on Sustainable Energy, Vol. 5, No. 4, pp. 1070-1079, Oct. 2014

47. O. Tor and M. **Shahidehpour**, "Crossroad of Power: Coordinating Electricity and Natural Gas Infrastructures in Turkey," Vol. 12, No. 6, pp. 49-62, IEEE Power and Energy Journal, Oct. 2014

48. Y. Jiang, J. Liu, W. Tian, M. **Shahidehpour**, M. Krishnamurthy "Energy Harvesting from Regenerative Braking of Trains for the Electrification of Railway Stations," IEEE Electrification, Vol. 2, No. 3, pp. 39-48, Sept. 2014

49. L. Che and M. **Shahidehpour**, "DC Microgrids: Economic Operation and Enhancement of Resilience by Hierarchical Control," IEEE Transactions on Smart Grid, Vol. 5, No. 5, pp. 2517-2526, Sept. 2014

50. H. Wu and M. **Shahidehpour**, "Chance-Constrained Day-Ahead Scheduling in Stochastic Power System Operations," IEEE Transactions on Power Systems, Vol. 29, No. 4, pp. 1583-1591, July 2014

51. M. Parvania, M. Fotuhi-Firuzabad, M. **Shahidehpour**, "Comparative Hourly Scheduling of Centralized and Distributed Storage in Day-Ahead Markets," IEEE Transactions on Sustainable Energy, Vol. 5, No. 3, pp. 729-737, July 2014

52. C. Lee, C. Liu, S. Mehrotra, and M. **Shahidehpour**, "Modeling Transmission Line Constraints in Two-stage Robust Unit Commitment Problem," IEEE Transactions on Power Systems, Vol. 29, NO. 3, pp. 1221-1231, May 2014

53. H. Wu and M. **Shahidehpour**, " Stochastic SCUC with Variable Wind Penetration Using Constrained Ordinal Optimization," IEEE Transactions on Sustainable Energy, Vol. 5, No. 2, pp. 379-388, April 2014

54. W. Tian, Z. Li, and M. **Shahidehpour**, "Renewable Energy Procurement in Illinois," Electricity Journal, Vol. 27, No. 2, pp. 43-51, Mar. 2014

55. M. Khodayar and M. **Shahidehpour**, "Optimal Strategies for Multiple Participants in Electricity Markets, IEEE Transactions on Power Systems, Vol. 27, No. 2, pp. 986-987, Mar. 2014

56. L. Che, M. Khodayar, and M. **Shahidehpour,** "Adaptive Protection System for Microgrids: Protection Practices of a Functional Microgrid System," IEEE Electrification Magazine, Vol. 2, No. 1, pp. 66-80, Mar. 2014

57. F. Aminifar, M. Fotuhi-Firuzabad, M. **Shahidehpour**, and S. Kamalinia, "Power System Dynamic State Estimation with Synchronized Phasor Measurements," IEEE Transactions on Instrumentation & Measurement, Vol. 63, No. 2, pp. 352-363, Feb. 2014

58. F. Aminifar, M. Fotuhi-Firuzabad, A. Safdarian, M. **Shahidehpour,** "Observability of Hybrid AC/DC Power Systems with Variable-Cost PMUs," IEEE Transactions on Power Delivery, Vol. 29, No. 1, pp. 345-352, Feb. 2014

59. L. Che, M. Khodayar, M. **Shahidehpour**, "Only Connect: Microgrids for Distribution System Automation," IEEE Power and Energy Magazine, Vol. 12, No. 1, pp. 70-81, Jan 2014

60. M. Parvania, M. Fotuhi-Firuzabad, M. **Shahidehpour**, "Optimal Demand Response Aggregation in Wholesale Electricity Markets," IEEE Transactions on Smart Grid, Vol. 4, No. 4, pp. 1957-1965, Dec. 2013

61. M. Khodaei, M. **Shahidehpour**, J. Choi, "Optimal Hourly Scheduling of Community-Aggregated Electricity Consumption," Korean Journal of Electrical Engineering & Technology, Vol. 8, No. 6, pp. 1251-1260, Nov. 2013

62. M. Khodayar and M. **Shahidehpour**, "Cutting Campus Energy Costs with Hierarchical Control: The Economical and Reliable Operation of a Microgrid," IEEE Electrification Magazine, Vol. 1, No. 1, pp. 40-56, Sept. 2013

63. S. Wang, Z. Li, L. Wu, M. **Shahidehpour,** Z. Li, "New Metrics for Assessing the Reliability and Economics of Microgrids in Distribution System," IEEE Transactions on Power Systems, Vol. 28, No. 3, pp. 2852-2861, Aug. 2013

64. M. Khodayar, L. Abreu, M. **Shahidehpour**, "Transmission-Constrained Intrahour Coordination of Wind and Pumped-Storage Hydro Units," IET Journal on Generation, Transmission & Distribution, Vol. 7, No. 7, pp. 755–765, July 2013

65. H Wu, M. **Shahidehpour**, M. Khodayar, "Hourly Demand Response in Day-ahead Scheduling Considering Generating Unit Ramping Cost," IEEE Transactions on Power Systems, Vol. 28, No. 3, pp. 2446-2454, Aug. 2013

66. M. Khodayar and M. **Shahidehpour**, "Stochastic Price-based Coordination of Intra-hour Wind Energy and Storage in a Generation Company," IEEE Transactions on Sustainable Energy, Vol. 4, No. 2, pp. 554-562, July 2013

67. A. Khodaei, M. **Shahidehpour**, "Microgrid-based Co-optimization of Generation and Transmission Planning in Power Systems," IEEE Transactions on Power Systems, Vol. 28, No. 2, pp. 1582-1590, May 2013

68. H. Wu, M. **Shahidehpour**, and A. Al-Abdulwahab, "Hourly Demand Response in Day-ahead Scheduling for Managing the Variability of Renewable Energy," IET Generation, Transmission & Distribution, Vol. 7, No. 3, pp. 226 – 234, Mar. 2013

69. C. Sahin, M. **Shahidehpour**, I. Erkmen, "Allocation of Hourly Reserve versus Demand Response for Security-Constrained Scheduling of Stochastic Wind Energy," IEEE Transactions on Sustainable Energy, Vol. 4, No. 1, pp. 219-228, Jan. 2013

70. C. Liu and M. **Shahidehpour**, "Interdisciplinary Operation of Natural Gas and Electric Power Systems," Wiley Encyclopedia of Electrical and Electronics, DOI: 10.1002/047134608X, Jan. 2013

71. M. Khodayar, M. Barati, and M. **Shahidehpour**, "Integration of High Reliability Distribution System in Microgrid Operation," IEEE Transactions on Smart Grid, Vol. 3, No. 4, pp. 1997-2006, Dec. 2012

72. A. Khodaei, M. **Shahidehpour**, L. Wu, and Z. Li, "Coordination of Short-Term Operation Constraints in Multi-Area Expansion Planning," IEEE Transactions on Power Systems, Vol. 27, No. 4, pp. 2242-2250, Nov. 2012

73. M. **Shahidehpour** and J. Clair**, "**A Functional Microgrid for Enhancing Reliability, Sustainability, and Energy Efficiency**,"** Electricity Journal, Vol. 25, No. 8, pp. 21-28 Oct. 2012

74. M. Khodayar, L. Wu, and M. **Shahidehpour**, "Hourly Coordination of Electric Vehicle Operation and Volatile Wind Power Generation in SCUC," IEEE Transactions on Smart Grid, Vol. 3, No. 3, pp. 1271-1279, Sept. 2012

75. F. Aminifar, M. Fotuhi-Firuzabad, M. **Shahidehpour**, and A. Safdarian, "Impact of WAMS Malfunction on Power System Reliability Assessment," IEEE Transactions on Smart Grid, Vol. 3, No. 3, pp. 1302-1309, Sept. 2012

76. A. Lotfjou, Y. Fu, and M. **Shahidehpour**, "Hybrid AC/DC Transmission Expansion Planning," IEEE Transactions on Power Delivery, Vol. 27, No. 3, pp. 1620-1628, July 2012

77. L. Abreu, M. Khodayar, M**. Shahidehpour**, L. Wu, "Risk-Constrained Coordination of Cascaded Hydro Units with Volatile Wind Power Generation" IEEE Transactions on Sustainable Energy, Vol. 3, No. 3, pp. 359-368, July 2012

78. C. Sahin, M. **Shahidehpour**, and I. Erkmen "Generation Risk Assessment in Volatile Conditions with Wind, Hydro, and Natural Gas Units" Applied Energy, Vol. 96, pp. 4-11, Aug. 2012

79. M. Granada, M. Rider, J. Mantovani, and M. **Shahidehpour**, "A decentralized Approach for Optimal Reactive Power Dispatch using a Lagrangian Decomposition Method," Electric Power Systems Research, Vol. 89, pp. 148–156, Aug. 2012

80. L. Wu, M. **Shahidehpour**, and Z. Li, "Comparison of Scenario-Based and Interval Optimization Approaches to Stochastic SCUC," IEEE Transactions on Power Systems, Vol. 27, No. 2, pp. 913-921, May 2012

81. A. Khodaei and M. **Shahidehpour**, "Security-Constrained Transmission Switching with Voltage Constraints," International Journal of Electrical Power and Energy Systems, Vol. 35, No. 1, pp. 74-82, Feb. 2012

82. J. Shu, L. Wu, Z. Li, M. **Shahidehpour**, L. Zhang, and B. Han, "A New Method for Spatial Power Network Planning in Complicated Environments," IEEE Transactions on Power Systems, Vol. 27, No. 1, pp. 381-389, Feb. 2012

83. W. Tian, M. **Shahidehpour**, and Z. Li, "Analysis of 2030 Large-Scale Wind Energy Integration in the Eastern Interconnection Using WINS," Electricity Journal, Vol. 24, No. 8, pp. 71-87, Oct. 2011

84. A. Khodaei, M. **Shahidehpour**, and S. Bahramirad, "SCUC With Hourly Demand Response Considering Intertemporal Load Characteristics," IEEE Transactions on Smart Grid, Vol. 2, No. 3, pp. 564-571, Sept. 2011

85. J. Choi, J. Park, T. Oh, K. Cho, J. Mitra, M**. Shahidehpour**, "Web Based Online Real-Time Information System for Reliability of Electrical Energy Supply Including WTG," Journal of International Council on Electrical Engineering, Vol. 1, No. 3, pp. 281-287, July 2011

86. J. Choi, J. Park, T. Oh, K. Cho, S. Hong, M. **Shahidehpour**, "Probabilistic Reliability Evaluation of Composite Power Systems Including Wind Turbine Generators," Journal of International Council on Electrical Engineering, Vol. 1, No. 3, pp. 274-280, July 2011

87. L. Wu and M. **Shahidehpour**, "Optimal Coordination of Stochastic Hydro and Natural Gas Supplies in Midterm Operation of Power Systems," IET Journal on Generation, Transmission & Distribution, Vol. 5, No. 5, pp. 577-587, May 2011

88. C. Liu, M. **Shahidehpour**, J. Wang, "Coordinated Scheduling of Electricity and Natural Gas Infrastructures with a Transient Model for Natural Gas Flow," Chaos (American Institute of Physics), Vol. 21, pp. 025102-1 through 025102-12 , May 2011

89. C. Sahin, Z. Li, M. **Shahidehpour**, and I. Erkmen, "Impact of Natural Gas System on Risk-Constrained Midterm Hydrothermal Scheduling," IEEE Transactions on Power Systems, Vol. 26, No. 2, pp. 520-531, May 2011

90. A. Lotfjou, M. **Shahidehpour**, and Y. Fu, "Hourly Scheduling of DC Transmission Lines in SCUC With Voltage Source Converters," IEEE Transactions on Power Delivery, Vol. 26, No. 2, pp. 650-660, April 2011

91. F. Aminifar, M. Fotuhi-Firuzabad, M. **Shahidehpour**, and A. Khodaei, "Observability Enhancement by Optimal PMU Placement Considering Random Power System Outages," Energy Systems, Vol. 2, pp. 45-65, Mar. 2011

92. P. Maghouli, S. Hosseini, M. Oloomi Buygi, and M. **Shahidehpour**, "A Scenario-Based Multi-Objective Model for Multi-Stage Transmission Expansion Planning," IEEE Transactions on Power Systems, Vol. 26, No. 1, pp. 470-478, Feb. 2011

93. C. Liu, M. **Shahidehpour**, and J. Wang, "Application of Augmented Lagrangian Relaxation to Coordinated Scheduling of Interdependent Hydrothermal Power and Natural Gas Systems," IET Journal on Generation, Transmission & Distribution, Vol. 4, No. 12, pp. 1314–1325 Dec. 2010

94. A. Khodaei and M. **Shahidehpour**, Y. Fu, "Transmission Switching in Security-Constrained Unit Commitment," IEEE Transactions on Power Systems, Vol. 25, No. 4, pp. 1937-1945, Nov. 2010

95. F. Aminifar, Saeed Bagheri-Shouraki, M. Fotuhi-Firuzabad, and M. **Shahidehpour**, "Reliability Modeling of PMUs using Fuzzy Sets," IEEE Transactions on Power Delivery, Vol. 25, No. 4, pp. 2384-2391, Oct. 2010

96. S. Kamalinia, M. **Shahidehpour**, and A. Khodaei, "Security-Constrained Expansion Planning of Fast-Response Units for Wind Integration," Electric Power System Research, Vol. 81, pp. 107-116, 2010

97. A. Rajabi-Ghahnavieh, M. Fotuhi-Firuzabad, M. **Shahidehpour**, and R. Feuillet, "UPFC for Enhancing Power System Reliability," IEEE Transactions on Power Delivery, Vol. 25, No. 4, pp. 2881-2890, Oct. 2010

98. L. Wu and M. **Shahidehpour**, Y. Fu, "Security-Constrained Generation and Transmission Outage Scheduling with Uncertainties," IEEE Transactions on Power Systems, Vol. 25, No. 3, pp. 1674-1685, Aug. 2010

99. A. Khodaei and M. **Shahidehpour**, S. Kamalinia, "Transmission Switching in Expansion Planning," IEEE Transactions on Power Systems, Vol. 25, No. 3, pp. 1722-1733, Aug. 2010

100. S. Kamalinia and **M. Shahidehpour**, "Generation Expansion Planning in Wind-Thermal Power Systems, IET Journal on Generation, Transmission & Distribution, Vol. 4, No. 8, pp. 940-951, Aug. 2010

101. O. Tor, A. Guven, and M. **Shahidehpour**, "Promoting the Investment on IPPs for Optimal Grid Planning," IEEE Transactions on Power Systems, Vol. 25, No. 3, pp. 1743-1750, Aug. 2010

102. A. Rajabi-Ghahnavieh, M. Fotuhi-Firuzabad, M. **Shahidehpour**, R. Feuillet, "A Cost/ Worth Approach to Evaluate UPFC Impact on ATC," International Journal of Electrical Engineering and Technology, Vol. 5, No. 3, pp 389-399, 2010.

103. L. Wu and M. **Shahidehpour**, "A Hybrid Model for Price Forecasting," IEEE Transactions on Power Systems, Vol. 25, No. 3, pp. 1519-1530, Aug. 2010

104. L. Wu and M. **Shahidehpour**, Y. Fu, "Accelerating the Benders Decomposition for Network-Constrained Unit Commitment Problems," Energy Systems, Vol. 1, pp. 339-376, July 2010

105. C. Liu, M. **Shahidehpour**, and L. Wu, "Extended Benders Decomposition for Two-Stage SCUC, IEEE Transactions on Power Systems, Vol. 25, No. 2, pp. 1192-1194, May 2010

106. S. Kamalinia and M. **Shahidehpour**, "Capacity Adequacy Calculation by Considering Locational Capacity Prices," IET Journal on Generation, Transmission & Distribution, Vol. 4, No. 3, pp. 376-385, Feb. 2010

107. A. Lotfjou and M. **Shahidehpour**, "Security-Constrained Unit Commitment with AC/DC Transmission Systems," IEEE Transactions on Power Systems, Vol. 25, No. 1, pp. 531-543, Feb. 2010

108. F. Aminifar, A. Khodaei, M. Fotuhi-Firuzabad, and M. **Shahidehpour**, "Contingency-Constrained PMU Placement in Power Networks," IEEE Transactions on Power Systems, Vol. 25, No. 1, pp. 1818-1830, Feb. 2010

109. Y. Fu, Z. Li, M. **Shahidehpour**, T. Zhang, and E. Litvinov, "Coordination of Midterm Outage Scheduling with Short-term Security-Constrained Unit Commitment," IEEE Transactions on Power Systems, Vol. 24, No. 4, Nov. 2009, pp. 1818-1830

110. L. Wu and **M. Shahidehpour**, "Financial Risk Evaluation in Stochastic PBUC," IEEE Transactions on Power Systems, Vol. 24, No. 4, pp. 1896-1897, Nov. 2009

111. L. Wu, M. **Shahidehpour**, and C. Liu, "MIP-based Post-Contingency Corrective Action with Quick-Start Units," IEEE Transactions on Power Systems, Vol. 24, No. 3, Nov. 2009, pp. 1898-1890

112. A. Rajabi-Ghahnavieh, M. Fotuhi-Firuzabad, M. **Shahidehpour**, R. Feuillet, "NATC and RATC Calculation in Restructured Power Systems," International Review of Electrical Engineering, Vol. 4. No. 4, pp. 592-600, Aug. 2009

113. C. Liu, M. **Shahidehpour**, and Z. Li "Security-Constrained Unit Commitment with Natural Gas Transmission Constraints," IEEE Transactions on Power Systems, Vol. 24, No. 3, pp. 1523-1536, Aug. 2009

114. J. Guo, Y. Fu, Z. Li, and M. **Shahidehpour,** "Direct calculation of Line Outage Distribution Factors," IEEE Transactions on Power Systems, Vol. 24, No. 3, pp. 1633-1634, Aug. 2009

115. J. Wang, M. **Shahidehpour**, and Z. Li "Contingency-Constrained Reserve Requirements in Joint Energy and Ancillary Services Auction," IEEE Transactions on Power Systems, Vol. 24, No. 3, pp. 1457-1468, Aug. 2009

116. J. Roh, M. **Shahidehpour**, and L. Wu, "Market-based Generation and Transmission Planning with Uncertainties," IEEE Transactions on Power Systems, Vol. 24, No. 3, pp. 1587-1598, August 2009

117. P. Maghouli, H. Hosseini, M. Oloomi Buygi, and M. **Shahidehpour**, "A Multi-Objective Framework for Transmission Expansion Planning in Deregulated Environments," IEEE Transactions on Power Systems, Vol. 24, No. 2, pp. 1051-1061, May 2009

118. J. Wang, M. **Shahidehpour**, and Z. Li "Strategic Generation Capacity Expansion Planning with Incomplete Information," IEEE Transactions on Power Systems, Vol. 24, No. 2, pp. 1002-1010, May 2009

119. C. Liu, M. **Shahidehpour**, and Z. Li "Component & Mode Models for the Short-term Scheduling of Combined-Cycle Units," IEEE Transactions on Power Systems, Vol. 24, No. 2, pp. 976-990, May 2009

120. A. Rajabi-Ghahnavieh, M. Fotuhi-Firuzabad, M. **Shahidehpour**, R. Feuillet, "Optimal Allocation of Available Transfer Capability in Operating Horizon," IEEE Transactions on Power Systems, Vol. 24, No. 2, pp. 967-975, May 2009

121. k. Aflaki, S. Jadid, and M. **Shahidehpour**, "Electric Power Restructuring in Iran: Facts and Challenges," Electricity Journal, Vol. 22, No. 2, pp. 74-83, Mar. 2009

122. F. Aminifar, M. Fotuhi-Firuzabad, and M. **Shahidehpour**, "Unit Commitment with Probabilistic Spinning Reserve and Interruptible Load Considerations," IEEE Transactions on Power Systems, Vol. 24, No. 1, pp. 388-397, Feb. 2009

123. H. Yamin and M. **Shahidehpour**, "Risk-Based Self-Scheduling for GenCos in the Day-Ahead Competitive Electricity Markets," European Transactions on Electrical Power, Vol. 19, No. 1, pp. 103-112, Jan. 2009

124. L. Wu and M. **Shahidehpour**, "GENCO's Risk-Constrained Hydrothermal Scheduling," IEEE Transactions on Power Systems, Vol. 23, No. 4, pp. 1847-1858, Nov. 2008

125. T. Li and **M. Shahidehpour**, "Interdependency of Natural Gas Network and Power System Security," IEEE Transactions on Power Systems, Vol. 23, No. 4, pp. 1817-1824, Nov. 2008

126. J. Wang, M. **Shahidehpour**, Z. Li, "Security-Constrained Unit Commitment with Volatile Wind Power Generation," IEEE Transactions on Power Systems, Vol. 23, No. 3, pp. 1319-1327, Aug. 2008

127. L. Wu and M. **Shahidehpour**, "Cost of Reliability Analysis based on Stochastic Unit Commitment," IEEE Transactions on Power Systems, Vol. 23, No. 3, pp. 1364-1374, Aug. 2008

128. O. Tor, A. Guven, and M. **Shahidehpour**, "Congestion-Driven Transmission Planning Considering the Impact of Generator Expansion," IEEE Transactions on Power Systems, Vol. 23, No. 2, pp. 781-790-137, May. 2008

129. L. Wu and M. **Shahidehpour** "GENCO's Risk-Based Maintenance Outage Scheduling," IEEE Transactions on Power Systems, Vol. 23, No. 1, pp. 127-137, Feb. 2008

130. Y. Fu and M. **Shahidehpour**, "Fast SCUC for Large Scale Power Systems," IEEE Transactions on Power Systems, Vol. 22, No. 4, pp. 2144-2151, November 2007

131. J. Roh, M. **Shahidehpour**, and Y. Fu, "Market-based Coordination of Transmission and Generation Capacity Planning," IEEE Transaction on Power Systems, Vol. 22, No. 4, pp. 1406-1419, Nov. 2007

132. T. Li and M. **Shahidehpour**, "Risk-Constrained Generation Asset Arbitrage in Power Systems," IEEE Transactions on Power Systems, Vol. 22, No. 3, pp. 1330-1339, Aug. 2007

133. Y. Fu, M. **Shahidehpour**, and Z. Li, "Security-Constrained Optimal Coordination of Generation and Transmission Maintenance Outage Scheduling," IEEE Transactions on Power Systems, Vol. 22, No. 3, pp. 1302-1313, Aug. 2007

134. T. Li and M. **Shahidehpour**, "Dynamic Ramping in Unit Commitment," IEEE Transactions on Power Systems, Vol. 22, No. 3, pp. 1379-1381, Aug. 2007

135. J. Roh, M. **Shahidehpour**, and Y. Fu, "Security-Constrained Resource Planning in Electricity Markets," IEEE Transactions on Power Systems, Vol. 22, No. 3, pp. 812-820, May 2007

136. L. Wu, M. **Shahidehpour**, and T. Li, "Stochastic Security-Constrained Unit Commitment," IEEE Transactions on Power Systems, Vol. 22, No. 3, pp. 800-811, May 2007

137. T. Li, M. **Shahidehpour**, and Z. Li, "Risk-Constrained Bidding Strategy with Stochastic Unit Commitment," IEEE Transactions on Power Systems, Vol. 22, No. 1, pp. 449-458, Feb. 2007

138. H. Yamin, Q. El-Dwairi, and M. **Shahidehpour**, "A New Approach for GenCos Profit Based Unit Commitment in Day-Ahead Competitive Electricity Markets Considering Reserve Uncertainty," International Journal of Electrical Power and Energy Systems, 2007

139. O. Tor and M. **Shahidehpour**, "Transmission Management in the Aftermath of Electricity Restructuring in Turkey," The Electricity Journal, Vol.19, No. 7, pp. 38-46, Sept. 2006

140. Y. Fu, M. **Shahidehpour**, and Z. Li, "AC Contingency Dispatch based on Security-Constrained Unit Commitment," IEEE Transactions on Power Systems, Vol. 21, No. 2, pp. 897-908, May 2006

141. M. Oloomi, H. Shanechi, G. Balzer, M. **Shahidehpour**, N. Pariz, "Network Planning in Unbundled Power Systems," IEEE Transactions on Power Systems, Vol. 21, No. 3, pp. 1379-1387, Aug. 2006

142. M. **Shahidehpour**, T. Li, and J. Choi, "Optimal Generation Asset Arbitrage In Electricity Markets," KIEE (Korea) International Transactions on Power Engineering, Vol. 5-A, No. 4, pp. 311-321, 2005

143. Y. Fu, M. **Shahidehpour**, and Z. Li, "Long-Term Security-Constrained Unit Commitment: Hybrid Dantzig-Wolfe Decomposition and Subgradient Approach," IEEE Transactions on Power Systems, Vol. 20, No. 4, pp. 2093-2106, Nov. 2005

144. T. Li, M. **Shahidehpour**, and Z. Li, "Price-Based Unit Commitment: A Case of Lagrangian Relaxation Versus Mixed Integer Programming," IEEE Transactions on Power Systems, Vol. 20, No. 4, pp. 2015-2025, Nov. 2005

145. M. **Shahidehpour**, W. Tinney, and Y. Fu, "Impact of Security on Power System Operation," IEEE Proceedings, Vol. 93, No. 11, pp. 2013 – 2025, Nov. 2005

146. Y. Fu, M. **Shahidehpour**, and Z. Li, "Security-Constrained Unit Commitment with AC Constraints," IEEE Transactions on Power Systems, Vol. 20, No. 3, pp. 1538-1550, Aug. 2005

147. T. Li and M. Shahidehpour, "Bidding Strategy for FTR Obligations in Transmission Markets," IEE Proceedings, Vol. 152, No. 3, pp. 422-428, May 2005

148. B. Lu and M. **Shahidehpour**, "Short-term Scheduling of Battery in Grid-Connected PV/ Battery System," IEEE Transactions on Power Systems, Vol. 20, No. 2, pp. 1053 – 1061, May 2005

149. M. **Shahidehpour,** Y. Fu, and T. Wiedman, "Impact of Natural Gas Infrastructure on Electric Power Systems," IEEE Proceedings, Vol. 93, No. 5, pp. 1042 – 1056, May 2005

150. Z. Li and M. **Shahidehpour**, "Security-Constrained Unit Commitment for Simultaneous Clearing of Energy and Ancillary Services Markets," IEEE Transactions on Power Systems, Vol. 20, No. 2, pp. 1079-1088, May 2005

151. M. **Shahidehpour** and R. Ferrero, "Chronological Strategies in Power Systems Asset Management," IEEE Power and Energy Magazine, Vol. 3, No. 3, pp. 32 - 38 2005, May 2005

152. B. Lu and M. **Shahidehpour**, "Unit Commitment with Flexible Generating Units," IEEE Transactions on Power Systems, Vol. 20, No. 2, pp. 1022-1034, May 2005

153. T. Li and M. **Shahidehpour**, "Risk-Constrained FTR Bidding Strategy in Transmission Markets," IEEE Transactions on Power Systems, Vol. 20, No. 2, pp. 1014-1021, May 2005

154. B. Lu and M. **Shahidehpour**, "Impact of Phase Shifters on Locational Prices," Special Issue, ASCE Journal of Energy Engineering, Vol. 131, No. 1, pp. 52-71, April 2005

155. M. **Shahidehpour** and H.Y. Yamin, "A Technique for the Standing Phase-Angle Reduction in Power System Restoration," Electric Power Components and Systems, Vol. 33. No. 3, pp. 277-286, Mar. 2005

156. M. **Shahidehpour**, "Cool Currents: Evolution of Superconductors in Electric Power Systems," IEEE Power and Energy Magazine, Vol. 3, No. 2, pp. 17-19, March 2005

157. M. **Shahidehpour** and Yong Fu, "Benders Decomposition," IEEE Power and Energy Magazine, Vol. 3, No. 2, pp. 20-21, March 2005

158. T. Li and M. **Shahidehpour**, "Strategic Bidding of Transmission-Constrained GENCOs with Incomplete Information," IEEE Transactions on Power Systems, Vol. 20, No. 1, pp. 437 – 447, Feb. 2005

159. H.Y. Yamin and M. **Shahidehpour**, "Risk and Profit in Self-Scheduling for GenCos," IEEE Transactions on Power Systems, Vol. 19, No. 4, pp. 2104-2105, Nov. 2004

160. M.O. Buygi, G. Balzer, H. Shanechi, M. **Shahidehpour**, "Market-based Transmission Expansion Planning," IEEE Transactions on Power Systems, Vol. 19, No. 4, pp. 2060-2067, Nov. 2004

161. E. Vaahedi and M. **Shahidehpour**, "Tools for Managing Restructured Energy Systems," Special Section, IEEE Transaction on Power Systems, Vol. 19, No. 4, pp. 1999-2005, Nov. 2004

162. Y. Fu and M. **Shahidehpour**, "Profit-based Generation Resource Planning," IMA Journal of Management Mathematics, (Oxford University Press), Vol. 15, No. 4, pp. 273-289, Oct. 2004

163. T. Li and M. **Shahidehpour**, "Market Power Analysis in Electricity Markets using Supply Function Equilibrium Model," IMA Journal of Management Mathematics (Oxford University Press), Vol. 15, No. 4, pp. 339-354, Oct. 2004

164. B. Lu and M. **Shahidehpour**, "Short-term Scheduling of Combined Cycle Units," IEEE Transactions on Power Systems, Vol. 19, No. 3, pp. 1616-1625, Aug. 2004

165. H. Yamin, S. Al-Agtash, and M. **Shahidehpour**, "Security-Constrained Optimal Generation Scheduling for GENCOs" IEEE Transactions on Power Systems, Vol. 19, No. 3, pp. 1365-1372, Aug. 2004

166. M. **Shahidehpour**, "The Business of Power," Guest Editorial, IEEE Power and Energy Magazine, Vol. 2, No. 4, pp. 26-28, July 2004

167. J. Wang and **M. Shahidehpour**, "Electricity Transaction Tagging Management in American Electricity Market," Automation of Electric Power Systems (in Chinese), Vol. 28, No. 2, pp. 8-12, May 2004

168. M. Marwali and M. **Shahidehpour**, "Role of Fuzzy Sets in Power System State Estimation," International Journal of Emerging Electric Power Systems, Vol. 1, May 2004

169. M. **Shahidehpour**, F. Schwatrz, "Don't Let the Sun Go Down on PV," IEEE Power and Energy Magazine, pp. 40-48, May 2004

170. M. **Shahidehpour**, "Investing in Expansion: The Many Issues that Cloud Electricity Planning," IEEE Power and Energy Magazine, pp. 14-18, Jan 2004

171. Z. Li and M. **Shahidehpour**, "Generation Scheduling with Thermal Stress Constraints," IEEE Transactions on Power Systems, Vol. 18, No. 4, pp. 1402-1409, Nov. 2003

172. H. Yamin, K. Al-Tallaq, and M. **Shahidehpour**, "A Novel Approach for Optimal Power Flow using Benders Decomposition in A Deregulated Power Market," Journal of Electric Power Components & Systems, Vol. 31, No. 12, Dec. 2003

173. H. Yamin, K. Al-Tallaq, M. **Shahidehpour**, "New Approach for Dynamic Optimal Power Flow using Benders Decomposition in a Deregulated Power Market," Journal of Electric Power Systems Research, No. 65, pp. 101-107, May 2003

174. A. Srivastava and M. **Shahidehpour**, "Restructuring Choices for the Indian Power Sector," IEEE Power Engineering Review, Vol. 22, No. 11, pp. 25-29, Nov. 2002

175. M. Oloomi Buygi, H. Modir Shanechi, and **M. Shahidehpour**, "Transmission Planning in Deregulated Environments," International Journal of Engineering, Vol. 15, No. 3, pp. 249-256, Oct. 2002

176. E. Rezania and M. **Shahidehpour**, "Real Power Loss Minimization Using Interior Point," Electric Power and Energy Systems, Vol. 23, pp. 45-56, 2001

177. M. Alomoush and M. **Shahidehpour**, "Contingency Constrained Congestion Management with a Minimum Number of Adjustments in Preferred Schedules," Electric Power and Energy Systems, Vol. 22, pp. 277-290, 2000

178. M. Alomoush and M. **Shahidehpour**, "Generalized Model for Fixed Transmission Rights Auction," Electric Power Systems Research, Vol. 29, pp. 207-220, 2000

179. M. Alomoush and M. **Shahidehpour**, "Fixed Transmission Rights for Inter-Zonal and Intra-Zonal Congestion Management," IEE Proc., Vol. 146, No. 5, pp. 471-476, Sept. 2000

180. M. Marwali and M. **Shahidehpour**, "Coordination Between Long-term and Short-term Generation Scheduling with Network Constraints," IEEE Transactions on Power Systems, Vol. 15, No. 3, pp. 1161-1167, Aug. 2000

181. M. Marwali and M. **Shahidehpour**, "Short-term Transmission Line Maintenance Scheduling in a Deregulated System," IEEE Transactions on Power Systems, Vol. 15, No. 3, pp. 1117-1124, Aug. 2000

182. J. Kavicky and M. **Shahidehpour**, "A Subarea-Level Transaction Simulation Frame-work Supporting Parallel Paths and Energy Tagging," IEEE Transactions on Power Systems, Vol. 15, No. 2, pp. 873-878, May 2000

183. M. Marwali and M. **Shahidehpour**, "A Probabilistic Approach to Generation Maintenance Scheduler with Network Constraints," Electric Power and Energy Systems, Vol. 21, pp. 533-545, Nov. 1999

184. M. Marwali and M. **Shahidehpour**, "Long-Term Transmission and Generation Maintenance Scheduling with Network, Fuel and Emission Constraints," IEEE Transactions on Power Systems, Vol. 14, No. 3, pp. 1160-1165, Aug. 1999

185. M. **Shahidehpour**, et. al., "The IEEE Reliability Test System," IEEE Transactions on Power Systems, Vol. 14, No. 3, pp. 1010-1020, Aug. 1999

186. E. Rezania and M. **Shahidehpour**, "Available Transfer Capacity Calculation by Interior Point," IEEE/PICA Tutorial on Applications of Interior Point Method to Power System Operation, 1999

187. M. **Shahidehpour** and H. Yamin, "Risk Management using Game Theory in Transmission Constrained Unit Commitment within a Deregulated Power Market," chapter in IEEE/PES Tutorial on Applications of Gaming Methods to Power System Operation, 1999

188. H. Ma and M. **Shahidehpour**, "Unit Commitment with Transmission Security and Voltage Constraints," IEEE Transactions on Power Systems, Vol. 14, No. 2, May 1999

189. M. **Shahidehpour** and M. Marwali, "Power Transmission Network," chapter in Wiley Encyclopedia of Electrical and Electronics Engineers, 1999

190. M. **Shahidehpour** and R. Ferrero, "Electricity Supply Industry," chapter in Wiley Encyclopedia of Electrical and Electronics Engineers, 1999

191. M. **Shahidehpour** and M. Alomoush, "Decision Making in a Deregulated Power Environment Based on Fuzzy Sets," book chapter in AI Applications to Power Systems, Kluwer Publishers, 1999

192. E. Rezania and M. **Shahidehpour**, "Calculation of Transfer Capability of Power Systems using an Efficient Predictor-Corrector Primal-Dual Interior-Point Algorithm," Electric Machines and Power Systems, Vol. 27, No. 1, pp. 25-38, Jan. 1999

193. M. Marwali and M. **Shahidehpour**, "A Deterministic Approach to Generation and Transmission Maintenance Scheduling with Network Constraints," Electric Power Systems Research, Vol. 47, No. 2, pp. 101-114, Oct. 1998

194. M. Marwali and M. **Shahidehpour**, "Short Term Generation Scheduling in Photovoltaic-Utility Grid with Battery Storage," IEEE Transactions on Power Systems, Vol. 13, No. 3, pp. 1057-1062, Aug. 1998

195. M. Marwali and M. **Shahidehpour**, "Integrated Generation and Transmission Maintenance Scheduling with Network Constraints," IEEE Transactions on Power Systems, Vol. 13, No. 3, pp. 1063-1068, Aug. 1998

196. R. Ferrero, J. Rivera and M. **Shahidehpour**, "A Dynamic programming Two Stage Algorithm for Long-Term Hydrothermal Scheduling of Multireservoir Systems," IEEE Transactions on Power Systems, Vol. 13, No. 4, pp. 1534-1540, Nov. 1998

197. H. Ma and M. **Shahidehpour**, "Transmission Constrained Unit Commitment Based on Benders Decomposition," Electric Power and Energy Systems, Vol. 20, No. 4, pp. 287-294, April. 1998

198. R. Ferrero, J. Rivera and M. **Shahidehpour**, "Application of Games with Incomplete Information for Pricing Electricity in Deregulated Power Pools," IEEE Transactions on Power Systems, Vol. 13, No. 1, pp. 184-189, Feb. 1998

199. M. Marwali and M. **Shahidehpour**, "Coordination of Short-term and Long-term Transmission Maintenance Scheduling in a Deregulated Systems," IEEE Power Engineering Letters, Vol. 1, No. 1, pp. 46-48, Feb. 1998

200. M. **Shahidehpour** and R. Ferrero, "Fuzzy Systems Approach to Short-Term Power Purchases Considering Uncertain Prices," book chapter in Electric Power Applications of Fuzzy Systems, IEEE Press, pp. 321-338, 1998

201. H. Ma and M. **Shahidehpour**, "Unit Commitment with Voltage Constraints," International Journal of Energy Research, Vol. 21, pp. 1385-1398, Nov. 1997

202. R. Ferrero and M. **Shahidehpour**, "Short-term Power Purchases Considering Uncertain Prices," IEE Proc., Vol. 144, No. 5, pp. 423-428, Sept. 1997

203. J. Kavicky and M. **Shahidehpour**, "Determination of Generator Siting and Contractor Options Based on Interutility Tie Line Flows," IEEE Transactions on Power Systems, Vol. 12, No. 4, pp. 1649-1653, Nov. 1997

204. R. Ferrero and M. **Shahidehpour**, "Optimality Conditions in Power Transactions in Deregulated Power Pools," Electric Power Systems Research, Vol. 42, pp. 209-214, 1997

205. R. Ferrero and M. **Shahidehpour** and V. Ramesh, "Transaction Analysis in Deregulate Power Systems using Game Theory," IEEE Transactions on Power Systems, Vol. 12, No. 3, pp. 1340-1347, August 1997

206. X. Bai, E. Yu and M. **Shahidehpour**, "Transmission Analysis by Nash Risk-based Optimal Bidding Strategies Method," IEEE Transactions on Power Systems, Vol. 12, No. 3, pp. 1046-1053, August 1997

207. R. Ferrero and M. **Shahidehpour**, "Optimal Power Transactions with Network Constraints in Deregulated Systems," Electric Machines and Power Systems, Vol. 25, No. 6, pp. 661-675, July 1997

208. M. Marwali, M. **Shahidehpour** and M. Daneshdoost, "Probabilistic Production Costing for Photovoltaic-Utility Systems with Battery Storage," IEEE Transactions on Energy Conversion, Vol. 12, No. 2, pp. 175-180, June 1997

209. H. Ma and M. **Shahidehpour**, "Decomposition Approach to Unit Commitment with Reactive Constraints," IEE Proc., Vol. 144, No. 2, pp. 113-117, March 1997

210. R. Ferrero and M. **Shahidehpour**, "Effect of Deregulation on Hydrothermal Systems with Transmission Constraints," Electric Power Systems Research, Vol. 42, pp. 191-197, 1997

211. X. Bai and M. **Shahidehpour**, "Extended Neighborhood Search Algorithm for Constrained Unit Commitment," Electrical Power and Energy Systems, Vol. 19, No. 5, pp. 349-356, 1997

212. R. Ferrero and M. **Shahidehpour**, "Dynamic Economic Dispatch in Deregulated Systems," Electrical Power and Energy Systems, Vol. 19, No. 7, pp. 433-439, 1997

213. J. Kavicky and M. **Shahidehpour**, "Parallel Path Aspects of Transmission Modeling," IEEE Transactions on Power Systems, Vol. 11, No. 3, pp. 1180-1190, 1996

214. X. Bai and M. **Shahidehpour**, "Hydro-thermal Scheduling by Tabu Search and Decomposition Method," IEEE Transactions on Power Systems, Vol. 11, No. 2, pp. 968-975, May 1996

215. R. Ferrero and M. **Shahidehpour**, "Energy Interchange in Deregulated Power Systems," Electrical Power and Energy Systems, Vol. 18, No. 4, pp. 251-258, May 1996

216. K. Abdul-Rahman and M. **Shahidehpour**, "A Practical Power Systems Resource Scheduling with OPF Constraints," IEEE Transactions on Power Systems, Vol. 11, No. 1, pp. 254 - 259, Feb. 1996

217. M. **Shahidehpour** and VC Ramesh, "Nonlinear Programming Algorithms and Decomposition Strategies for OPF," chapter in IEEE/PES Tutorial on Optimal Power Flow, 1996

218. S. Wang and M. **Shahidehpour**, "Power Systems Marginal Cost Curve and Its Applications," IEEE Transactions on Power Systems, Vol. 10, No. 3, pp. 1321-1328, Aug. 1995

219. S. Wang and M. **Shahidehpour**, "Short-term Generation Scheduling with Transmission and Environmental Constraints Using an Augmented Lagrangian Relaxation," IEEE Transactions on Power Systems, Vol. 10, No. 3, pp. 1294-1301, Aug. 1995

220. K. Abdul-Rahman, M. **Shahidehpour** and N. Deeb, "Effect of EMF on Minimum Cost Power Transmission," IEEE Transactions on Power Systems, Vol. 10, No. 1, pp. 347-355, Feb. 1995

221. K. Abdul-Rahman and M. **Shahidehpour**, "Static Security in Power System Operation with Fuzzy Real Load Conditions," IEEE Transactions on Power Systems, Vol. 10, No. 1, pp. 77-87, Feb. 1995

222. C. Wang and M. **Shahidehpour**, "Optimal Generation Scheduling with Ramping Costs," IEEE Transactions on Power Systems, Vol. 10, No. 1, pp. 60-67, Feb. 1995

223. K. Abdul-Rahman, M. **Shahidehpour** and M. Daneshdoost, "AI Approach to Optimal Var Control with Fuzzy Reactive Loads," IEEE Transactions on Power Systems, Vol. 10, No. 1, pp. 88-97, Feb. 1995

224. C. Wang and M. **Shahidehpour**, "Ramp-Rate Limits in Unit Commitment and Economic Dispatch Incorporating Rotor Fatigue Effect," IEEE Transactions on Power Systems, Vol. 9, No. 3, pp. 1539-1545, Aug. 1994

225. I. Roytelman and M. **Shahidehpour**, "A Comprehensive Long Term Dynamic Simulation for Power System Recovery," IEEE Transactions on Power Systems, Vol. 9, No. 3, pp. 1427-1433, Aug. 1994

226. M. **Shahidehpour** and C. Wang, "Applications of Artificial Neural Networks in Multi-Area Generation Scheduling with Fuzzy Data," EPRI Publication TR-104219, July 1994

227. K. Labudda and M. **Shahidehpour**, "Fuzzy Multi-Objective Approach to Power System State Estimation," International Journal of Engineering Intelligent Systems, Vol. 2, No. 2, pp. 83-92, June 1994

228. K. Abdul-Rahman and M. **Shahidehpour**, "Application of Fuzzy Sets to Optimal Reactive Power Planning with Security Constraints," IEEE Transactions on Power Systems, Vol. 9, No. 2, pp. 589-597, May 1994

229. K. Abdul-Rahman and M. **Shahidehpour**, "Reactive Power Optimization Using Fuzzy Load Representation," IEEE Transactions on Power Systems, Vol. 9, No. 2, pp. 898-905, May 1994

230. M. **Shahidehpour**, et. al, "Effect of Protection Systems on Bulk Power Reliability Evaluation," IEEE Transactions on Power Systems, Vol. 9, No. 1, pp. 198-205, Feb. 1994

231. N. Deeb and M. **Shahidehpour**, "Cross Decomposition for Multi-Area Optimal Reactive Power Planning," IEEE Transactions on Power Systems, Vol. 8, No. 3, pp. 1539-1544, Nov. 1993

232. C. Nwankpa, M. **Shahidehpour** and Z. Schuss, "A Generalized Approach to the Mean First Passage Time of a Dynamic Power System," Int. J. Systems Sciences, Vol. 24, No. 11, pp. 2097-2015, 1993

233. I. Roytelman and M. **Shahidehpour**, "State Estimation for Electric Power Distribution Systems in Quasi-Real time Conditions," IEEE Transactions on Power Delivery, Vol. 8, No. 4, pp. 2009-2015, October 1993

234. I. Roytelman and M. **Shahidehpour**, "Practical Aspects of Distribution Automation in Normal and Emergency Conditions," IEEE Transactions on Power Delivery, Vol. 8, No. 4, pp. 2002-2008, October 1993

235. C. Wang and M. **Shahidehpour**, "Power Generation Scheduling for Multi-Area Hydro-Thermal Systems with Tie Line Constraints, Cascaded Reservoir and Uncertain Data," IEEE Transactions on Power Systems, Vol. 8, No. 3, pp. 1333-1340, Aug. 1993

236. C. Wang and M. **Shahidehpour**, "Effects of Ramp-Rate Limits on Unit Commitment and Economic Dispatch," IEEE Transactions on Power Systems, Vol. 8, No. 3, pp. 1341-1350, Aug. 1993

237. S. Li and M. **Shahidehpour**, "An Object Oriented Power System Graphics Package for Personal Computer Environment," IEEE Transactions on Power Systems, Vol. 8, No. 3, pp. 1054-1060, Aug. 1993

238. K. Abdul-Rahman and M. **Shahidehpour**, "A Fuzzy-Based Optimal Reactive Power Control," IEEE Transactions on Power Systems, Vol. 8, No. 2, pp. 662-670, May 1993

239. C. Wang and M. **Shahidehpour**, "Optimal Generation Scheduling for Constrained Multi-Area Hydro-Thermal Power Systems with Cascaded Reservoirs," J. Optimization Theory and Applications (JOTA), Vol. 78, No. 1, pp. 59-76, July 1993

240. S. Li, M. **Shahidehpour** and C. Wang, "Promoting the Application of Expert Systems in Short-Term Unit Commitment," IEEE Transactions on Power Systems, Vol. 8, No. 1, pp. 286-292, Feb. 1993

241. M. **Shahidehpour**, "Enhancing Traditional Power System Computing Using AI Techniques," chapter in IEEE/PES Tutorial on Knowledge-Based System Techniques with Applications to Power Systems, 1993

242. J. Giri, M. **Shahidehpour**, D. Kirschen and J. Zaborsky, "New Approaches in Power System Restoration," IEEE Transactions on Power Systems, Vol. 7, No. 3, pp. 1428-1434, Nov. 1992

243. C. Nwankpa, M. **Shahidehpour** and Z. Schuss, "A Stochastic Approach to Small Signal Stability Analysis," IEEE Transactions on Power Systems, Vol. 7, No. 3, pp. 1519-1528, Nov. 1992

244. C. Wang and M. **Shahidehpour**, "A Decomposition Approach to Non-Linear Multi-Area Generation Scheduling with Tie-Line Constraints using Expert Systems," IEEE Transactions on Power Systems, Vol. 7, No. 3, pp. 1409-1418, Nov. 1992

245. C. Wang and M. **Shahidehpour**, "Application of the Equivalent Area Model to Multi-Area Generation Scheduling with Tie-Line Constraints," Int. J. Electrical Power and Energy Systems, Vol. 14, No. 1, pp. 264-275, Aug. 1992

246. J. Delson and M. **Shahidehpour**, "Linear Programming Applications to Power System Economics, Planning and Operations," IEEE Transactions on Power Systems, Vol. 7, No. 3, pp. 1155-1163, Aug. 1992

247. S. Tong and M. **Shahidehpour**, "A Scheduling Model for the Daily Operation of an Electric Power System," Applied Mathematical Modelling, Vol. 16, pp. 226-244, May 1992

248. Z. Ouyang and M. **Shahidehpour**, "A Multi-Stage Intelligent System for Unit Commitment," IEEE Transactions on Power Systems, Vol. 7, No. 2, pp. 639-646, May 1992

249. Z. Ouyang and M. **Shahidehpour**, "A Hybrid Artificial Neural Networks-Dynamic Programming Approach to Unit Commitment," IEEE Transactions on Power Systems, Vol. 7, No. 1, pp. 236-242, Feb. 1992

250. C. Nwankpa and M. **Shahidehpour**, "Decisions for the Prevention of a Voltage Collapse in Electric Power Systems," Information and Decision Technologies, Vol. 18, No. 1, pp. 1-31, Jan. 1992

251. S. Tong and M. **Shahidehpour**, "An Overview of Power Generation Scheduling in the Optimal Operation of a Large Scale Power System," Electric Machines and Power Systems, Vol. 19, No. 5, PP. 731-762, Sept. 1991

252. S. Tong and M. **Shahidehpour**, "Probabilistic Assessment of Hydro-thermal Unit Commitment," Information and Decision Technologies, Vol. 17, pp. 169-187, Aug. 1991

253. Z. Ouyang and M. **Shahidehpour**, "A Heuristic Short-Term Unit Commitment," IEEE Transactions on Power Systems, Vol. 6, No. 3, pp. 1210-1216, Aug. 1991

254. Z. Ouyang and M. **Shahidehpour**, "An Intelligent Dynamic Programming for Unit Commitment Applications," IEEE Transactions on Power Systems, Vol. 6, No. 3, pp. 1203-1209, Aug. 1991

255. C. Nwankpa and M. **Shahidehpour**, "Stochastic Model for Power System Planning Studies," IEE Proceedings, Part C, Vol. 138, No. 4, pp. 307-320, July 1991

256. C. Nwankpa and M. **Shahidehpour**, "A Nonlinear Stochastic Model for Small Disturbance Stability Analysis of Electric Power Systems," Int. J. Electric Power and Energy Systems, Vol. 13, No. 3, pp. 139-147, June 1991

257. Z. Ouyang and M. **Shahidehpour**, "A Heuristic Multi-Area Unit Commitment with Economic Dispatch," IEE Proceedings, Part C, Vol. 138, No. 3, pp. 242-252, May 1991

258. C. Nwankpa and M. **Shahidehpour**, "Analysis of Small Disturbances of Transmission Lines in Dynamic Stability Studies," Int. J. Systems Sciences, Vol. 22, No. 5, pp. 845-872, Apr. 1991

259. N. Deeb and M. **Shahidehpour**, "A Decomposition Approach for Minimizing Real Power Losses in Power Systems," IEE Proceedings, Part C, Vol. 138, No.1, pp. 27-38, Jan. 1991

260. Z. Ouyang and M. **Shahidehpour**, "Short-Term Unit Commitment Expert System," Electric Power Systems Research, Vol. 20, No. 1, pp. 1-13, Nov. 1990

261. N. Deeb and M. **Shahidehpour**, "Cost Minimization in Allocation of Reactive Power Sources," Int. J. Electric Power and Energy Systems, Vol. 12, No. 4, pp. 263-270, Oct. 1990

262. G. Stefanek, M. **Shahidehpour** and Z. Ouyang, "The Application of Artificial Intelligence to Power System Operation," Intelligence Systems Review, Vol. 2, No. 2, pp. 14-24, Sept. 1990

263. N. Deeb and M. **Shahidehpour**, "An Overview of Reactive Power Optimization in Electric Power Systems," Electric Machines and Power Systems, Vol. 18, No. 5, pp. 495-518, Sept. 1990

264. C. Nwankpa and M. **Shahidehpour**, "Colored Noise Modeling in the Reliability Evaluation of Electric Power Systems," Applied Mathematical Modelling, Vol. 14, No. 7, pp. 338-351, July 1990

265. N. Deeb and M. **Shahidehpour**, "Linear Reactive Power Optimization in a Large Power Network Using the Decomposition Approach," IEEE Transactions on Power Systems, Vol. 5, No. 2, pp. 428-438, May 1990

266. S. Tong and M. **Shahidehpour**, "An Innovative Approach to Generation Scheduling in Large-Scale Power Systems With Fuel Constrained Units," IEEE Transactions on Power Systems, Vol. 5, No. 2, pp. 665-673, May 1990

267. N. Deeb and M. **Shahidehpour**, "Improved System Operation by Optimal Adjustment of Reactive Generation in Electric Power Network," Int. J. Energy Research, Vol. 14, No. 1, pp. 651-664, March 1990

268. S. Tong and M. **Shahidehpour**, "Hydrothermal Unit Commitment with Probabilistic Constraints Using Segmentation Method," IEEE Transactions on Power Systems, Vol. 5, No. 1, pp. 276-282, Feb. 1990

269. C. Nwankpa and M. **Shahidehpour**, "A Class of Load Perturbations in Reliability Evaluation of Electric Power Systems," Electric Machines and Power Systems, Vol. 17, pp. 233-257, Nov. 1989

270. J. Qiu, M. **Shahidehpour** and Z. Schuss, "Random Perturbation of Transfer Capability and Its Effect on Power Systems Reliability Evaluation," Int. J. Electric Power and Energy Systems, Vol. 11, No. 4, pp. 253-266, Oct. 1989

271. S. Shah and M. **Shahidehpour**, "A Heuristic Approach to Load Shedding Scheme," IEEE Transactions on Power Systems, Vol. 4, No. 4, pp. 1414-1420, Oct. 1989

272. S. Tong and M. **Shahidehpour**, "Combination of Lagrangian Relaxation and Linear Programming Approaches for Fuel Constrained Unit Commitment Problem," IEE Proceedings, Part C, Vol. 136, No. 3, pp. 162-174, May 1989

273. J. Qiu, M. **Shahidehpour** and Z. Schuss, "Effect of Small Random Perturbations on Power Systems Dynamics and Its Reliability Evaluation," IEEE Transactions on Power Systems, Vol. 4, No. 1, pp. 197-204, Feb. 1989

274. R. Billinton, R. Allan, M. **Shahidehpour** and C. Singh, "Bibliography on the Application of Probability Methods in Power System Reliability Evaluation," IEEE Transactions on Power Systems, Vol. 3, No. 4, pp. 1555-1564, Nov. 1988

275. N. Deeb and M. **Shahidehpour**, "An Efficient Technique for Reactive Power Dispatch Using a Revised Linear Programming Approach," Electric Power Systems Research, Vol. 15, No. 2, pp. 121-134, June 1988

276. N. Abbasy and M. **Shahidehpour**, "An Optimal Set of Measurements for the Estimation of System States in Large-Scale Power Networks," Electric Machines and Power Systems, Vol. 15, No. 5, p. 311-332, May 1988

277. J. Endrenyi and M. **Shahidehpour**, "Bulk Power System Reliability Concepts and Applications," IEEE Transactions on Power Systems, Vol. 3, No. 1, pp. 109-117, Feb. 1988

278. J. Qiu and M. **Shahidehpour**, "A New Approach for Minimizing Power Losses and Improving Voltage Profile," IEEE Transactions on Power Systems, Vol. 2, pp. 287-295, May 1987

279. J. Banda and M. **Shahidehpour**, "Surge Protection with Metal Oxide Arresters in Multi-Line Underground Distribution Systems," Electric Power Systems Research, Vol. 12, No. 1, pp. 19-26, May 1987

280. N. Abbasy and M. **Shahidehpour**, "Application of Nonlinear Programming in Power System State Estimation," Electric Power Systems Research, Vol. 11, No. 3, pp. 41-50, Jan. 1987

281. J. Qiu and M. **Shahidehpour**, "Effect of Random Perturbations on Power Systems Dynamic Behavior," Electric Power Systems Research, Vol. 11, No. 2, pp. 117-127, Dec. 1986

282. M. **Shahidehpour**, "Reliability Evaluation of a Three-Area Power System," Electric Power Systems Research, Vol. 10, No. 3, pp. 221-233, Sept. 1986

Journal Correspondence

1. M. **Shahidehpour** and S. Pullins, "Microgrids, Modernization, and Rural Electrification, ?" IEEE Electrification Magazine, Vol. 2, No. 2, Mar. 2015

2. M. **Shahidehpour**, "High-Impact Science" IEEE Electrification Magazine, Vol. 2, No. 2, Mar. 2015

3. M**. Shahidehpour** and Steve Pullins, "Is the Microgrid Buzz Real?" IEEE Electrification Magazine, Vol. 1, No. 2, Mar. 2014

4. M. **Shahidehpour**, "PES Launches Two New Transactions," IEEE Power and Energy E-News, May 2010

5. M. **Shahidehpour**, "Energy Efficiency: Perfect Power System Techniques & Applications," IEEE Power and Energy Magazine, Vol. 6, No. 7, pp. 25-26, Dec. 2008

6. M. **Shahidehpour**, "Transmission Planning in Restructured Systems," IEEE Power and Energy Magazine, Vol. 5, No. 5, pp. 18-22, Sept. 2007

7. M. **Shahidehpour**, "Our Aging Power Systems," IEEE Power and Energy Magazine, Vol. 4, No. 3, pp. 22-23, May 2006

8. M. Ilic, J. Chow, F. Galiana, M. **Shahidehpour**, R. Thomas, F. Wu, "Special Issue on Power Technology and Policy: Forty Years After the 1965 Blackout, Proceedings of the IEEE, Nov. 2005

9. M. **Shahidehpour**, "A Delicate Balance: The business and Science of Asset Management," IEEE Power and Energy Magazine, Vol. 3, No. 3, pp. 32 - 38, May 2005

10. M. **Shahidehpour,** "Bioengineering Education," Bridge Magazine, p. 17, Jan. 2003

11. M. **Shahidehpour**, "Education of Electricity Restructuring," Bridge Magazine, p. 17, Sept. 2003

12. M. **Shahidehpour**, Book Review of Power System Economics: Designing Markets for Electricity, IEEE Power and Energy Magazine, Vo. 1, No. 1, pp. 63-64, Jan. 2003

13. M. **Shahidehpour**, Book Review of Building and Solving Mathematical Programming Models in Engineering and Science," IEEE Computer Applications in Power, Vol. 15, No. 3, pp. 54-56, July 2002

14. Roytelman and M. **Shahidehpour**, "Distribution System State Estimation," IEEE Transactions on Power Systems, Vol. 10, No. 1, pp. 237-238, Feb. 1995

15. M. **Shahidehpour**, "Integrated Treatment of Adequacy and Security in Bulk Power System Reliability Evaluation," IEEE Transactions on Power Systems, Vol. 8, No. 1, pp. 283-285, Feb. 1993

16. N. Deeb and M. **Shahidehpour**, "Power System Expansion Planning Under Uncertainty," IEEE Transactions on Power Systems, Vol. 8, No. 1, p. 136, Feb. 1993

17. Z. Ouyang and M. **Shahidehpour**, "A Solution Method of Unit Commitment by Artificial Neural Network," IEEE Transactions on Power Systems, Vol. 7, No. 3, p. 981, Aug. 1992

18. N. Deeb and M. **Shahidehpour**, "A Decomposed States Estimator Technique Suitable for parallel Processor Implementation," IEEE Transactions on Power Systems, Vol. 7, No. 3, pp. 1096-1097, Aug. 1992

19. Z. Ouyang and M. **Shahidehpour**, "A New Approach for Solving Extended Unit Commitment Problem," IEEE Transactions on Power Systems, Vol. 6, No. 2, pp. 276-277, Feb. 1991

20. C. Nwankpa and M. **Shahidehpour**, "A Method to Compute Reactive Power Margins with Respect to Voltage Collapse," IEEE Transactions on Power Systems, Vol. 6, No. 2, pp. 154-155, Feb. 1991

21. N. Deeb and M. **Shahidehpour**, "Security-Constraint Reactive Power Dispatch," IEEE Transactions on Power Systems, Vol. 6, No. 2, p. 117, Feb. 1991

22. S. Tong and M. **Shahidehpour**, "Unit Commitment in Thermal Power Systems with Long-Term Energy Constraints," IEEE Transactions on Power Systems, Vol. 5, No. 4, p. 1477, Nov. 1990

23. N. Deeb and M. **Shahidehpour**, "Application of Newton's Optimal Power Flow in Voltage/ Reactive Power Control," IEEE Transactions on Power Systems, Vol. 5, No. 4, p. 1454, Nov. 1990

24. N. Deeb and M. **Shahidehpour**, "Multi-Year Multi-Case Optimal VAR Planning," IEEE Transactions on Power Systems, Vol. 5, No. 4, p. 1301, Nov. 1990

25. S. Tong and M. **Shahidehpour**, "Unit Commitment in Interconnected Generating Systems Using Probabilistic Techniques," IEEE Transactions on Power Systems, Vol. 5, No. 4, p. 1238, Nov. 1990

26. N. Deeb and M. **Shahidehpour**, "On Estimation of Uncertainties in Analog Measurements," IEEE Transactions on Power Systems, Vol. 5, No. 4, pp. 1229-1230, Nov. 1990

27. Z. Ouyang and M. **Shahidehpour**, "Short Term Load Forecasting of Taiwan Power System Using a Knowledge Based Expert System," IEEE Transactions on Power Systems, Vol. 5, No. 4, p. 1221, Nov. 1990

28. C. Wang and M. **Shahidehpour**, "Hydrothermal Scheduling of a Multireservoir Power System with Stochastic Inflows," IEEE Transactions on Power Systems, Vol. 5, No. 3, p. 773, Aug. 1990

29. C. Nwankpa and M. **Shahidehpour**, "An Energy Based Security Measure for Assessing Vulnerability to Voltage Collapse," IEEE Transactions on Power Systems, Vol. 5, No. 2, p. 426, May 1990

30. C. Nwankpa and M. **Shahidehpour**, "On Voltage Collapse in Electric Power Systems," IEEE Transactions on Power Systems, Vol. 5, No. 2, pp. 609-610, May 1990

31. S. Tong and M. **Shahidehpour**, "Short-term Hydro-thermal Dispatch, Detailed Model and Solutions," IEEE Transactions on Power Systems, Vol. 4, No. 4, p. 1461, Oct. 1989

32. S. Tong and M. **Shahidehpour**, "Implementation of a Lagrangian Relaxation Based Unit Commitment Problem," IEEE Transactions on Power Systems, Vol. 4, No. 4, p. 1380, Oct. 1989

33. M. **Shahidehpour**, "Expert Systems in Electric Power Systems-A Bibliographical Survey," IEEE Transactions on Power Systems, Vol. 4, No. 4, p. 1362, Oct. 1989

34. N. Deeb and M. **Shahidehpour**, "Reactive Power Dispatch by Successive Quadratic Programming," IEEE Transactions on Energy Conversion, Vol. 4, No. 3, p. 434, Sept. 1989

35. N. Abbasy and M. **Shahidehpour**, "Operating Experience with the AEP State Estimator," IEEE Transactions on Power Systems, Vol. 3, No. 2, p. 527, May 1988

36. S. Tong and M. **Shahidehpour**, "Unit Commitment in a Large Scale Power System Including Fuel Constrained Thermal and Pumped Storage Hydro," IEEE Transactions on Power Systems, Vol. 2, No. 4, p. 1084, Nov. 1987

Conference Papers

1. W. Tian, Y. Jiang, M. **Shahidehpour**, M. Krishnamurthy, "Vehicle Charging Stations with Solar Canopy: A realistic case study within a smart grid environment," in Proceedings, 2014 IEEE Transportation Electrification Conference and Expo (ITEC), Sept. 2014, Dearborn

2. M. **Shahidehpour**, "Microgrids for Enhancing the Economics, Reliability, and Resilience of Smart Cities – An IIT Experience", in Proceedings 2014 Smart Grid Conference, Dec. 2014, Tehran, Iran

3. M. **Shahidehpour** and M. Khodayar, "Coordination of Wind and Pumped-Storage Hydro Units for Managing Transmission Security," in Proceedings of IEEE/PES General Meeting, July 2012, San Diego

4. M. Parvania, M. Fotuhi-Firuzabad, and M. **Shahidehpour**, "Demand response participation in wholesale energy markets," in Proceedings of IEEE/PES General Meeting, July 2012, San Diego

5. M. **Shahidehpour**, M. Khodayar, and M. Barati, "Campus Microgrid: High Reliability for Active Distribution Systems," in Proceedings of IEEE/PES General Meeting, July 2012, San Diego

6. M. **Shahidehpour** and H. Wu, "Stochastic Operation Security with Demand Response and Renewable Energy," in Proceedings of IEEE/PES General Meeting, July 2012, San Diego

7. A. Khodaei and M. **Shahidehpour**, "Optimal Operation of a Community-based Microgrid," in Proceedings of the 2011 IEEE-ISGT-Australia Conference, Perth, Australia, Oct. 2011

8. M. Shahidehpour, "Smart Grid Education and Workforce Training Center," in Proceedings of the 2011 IEEE-ISGT-Australia Conference, Perth, Australia, Oct. 2011

9. K. Cho; J. Park, T. Oh, J. Choi, A. El-Keib, M. **Shahidehpour**; "Probabilistic Reliability Criterion for Expansion Planning of Grids Including Wind Turbine Generators," in Proceedings of the 2011 IEEE Power & Energy Society General Meeting, Detroit, July 2011

10. M. Parvania, M. Fotuhi-Firuzabad, and M. **Shahidehpour**, "Assessing impact of demand response in emission-constrained environments," in Proceedings of IEEE/PES General Meeting, Detroit, MI, USA, Jul. 2011.

11. W. Tian, Z. Li, and M. **Shahidehpour**, "Transmission congestion analysis in the Eastern Interconnection using POMS," in Proceedings of 2010 IEEE Power and Energy Society General Meeting, July 2010

12. J. Park; T. Oh; J. Choi; D. Jeon; A. El-Keib, M. **Shahidehpour**, "Grid Expansion Planning Considering Probabilistic Production and Congestion Costs based on Nodal Effective Load Model," in Proceedings of 2010 IEEE Power & Energy Society General Meeting, Minneapolis, July 2010

13. J. Choi; J.Park; M. **Shahidehpour**, and R. Billinton, "Assessment of CO2 Reduction by Renewable Energy Generators," in Proceedings of the Innovative Smart Grid Technologies Conference, Gaithersburg, MD, Jan 2010

14. J. Park; J. Choi; M. **Shahidehpour**, K. Lee, and R. Billinton, "New Efficient Reserve Rate Index of Power System including Renewable Energy Generators," in Proceedings of the Innovative Smart Grid Technologies Conference, Gaithersburg, MD, Jan 2010

15. J. Park, L. Wu, J. Choi. A. El-Keib, and M. **Shahidehpour**, "Transmission System Expansion Planning by Nodal Delivery Marginal Rate Criterion," in Proceedings of Transmission & Distribution Conference & Exposition: Asia and Pacific, Seoul, Korea, 2009

16. C. Sahin and M. Shahidehpour, "Interdependence of NG and Electricity Infrastructures in Turkey," in Proceedings of 2009 IEEE PES General Meeting, Calgary, Canada, July 2009

17. L. Wu, J. Park, J. Choi; A. El-Keib, M. **Shahidehpour**, R. Billinton, "Probabilistic Reliability Evaluation of Power Systems Including Wind Turbine Generators using a Simplified Multi-State Model: A Case Study," in Proceedings of the 2009 IEEE Power & Energy Society General Meeting, Calgary, July 2009

18. S. Jeong, J. Choi, J. Kim; Y. Lee; A. El-Keib, M. **Shahidehpour**, "Flexible Best Generation Mix for Korea Power System Considering CO2 Constraint — vision 2030," in Proceedings of 2008 IEEE Power and Energy Society General Meeting, July 2008

19. J. Park; L. Wu, J. Choi, A. El-Keib, M. **Shahidehpour**, and R. Billinton, "A Probabilistic Reliability Evaluation of a Power System including Solar/Photovoltaic Cell Generator," in Proceedings of 2009 IEEE Power & Energy Society General Meeting, Calgary, July 2009

20. **M. Shahidehpour**, "Stochastic Security-Constrained Unit Commitment," in Proceedings of the 2006 IEEE General Meeting, Tampa, FL, June 2007

21. J. Roh, **M. Shahidehpour**, and Y. Fu, "Security-Constrained Resource Planning in Electricity Markets," in Proceedings of the Market Design 2007 Conference, Stockholm, June 2007

22. O. Tor and M. **Shahidehpour**, "Power Distribution Asset Management," in Proceedings of the 2006 IEEE General Meeting, Montreal, June 2006

23. Joseph and M. **Shahidehpour**, "Battery Storage Systems in Electric Power Systems," in Proceedings of the 2006 IEEE General Meeting, Montreal, June 2006

24. T. Ratajczak and M. **Shahidehpour**, "Emerging Technologies For Coal-Fired Generation," in Proceedings of the 2006 IEEE General Meeting, Montreal, June 2006

25. O. Tor and M. **Shahidehpour**, "Electric Power Distribution Asset Management," in Proceedings of the 4th International Conference on Electrical and Electronics Engineering, Bursa, Turkey, December 2005

26. M. **Shahidehpour**, "Impact of Electricity Markets on Electric Power Systems," in Proceedings of the 4th International Conference on Electrical and Electronics Engineering, Bursa, Turkey, December 2005

27. M. **Shahidehpour**, "Simultaneous Energy and Transmission Auction," in Proceedings of the 2005 IEEE General Meeting, San Francisco, CA, June 2005

28. R. Pegallapati, F. Schwartz, and M. **Shahidehpour**, "Small Hydro as Renewable Energy," in Proceedings of the 2005 IEEE General Meeting, San Francisco, CA, June 2005

29. S. Sheth and M. **Shahidehpour**, "Tidal Energy in Electric Power Systems," in Proceedings of the 2005 IEEE General Meeting, San Francisco, CA, June 2005

30. S. Sood, S. Kullanthasamy, and M. **Shahidehpour**, "Solar Power Transmission from Space to Earth," in Proceedings of the 2005 IEEE General Meeting, San Francisco, CA, June 2005

31. N. Sriram and M. **Shahidehpour**, Renewable Biomass Energy," in Proceedings of the 2005 IEEE General Meeting, San Francisco, CA, June 2005

32. O. Tor and M. **Shahidehpour**, "Restructuring in Turkey," in Proceedings of the 2004 IEEE General Meeting, San Francisco, CA, June 2004

33. S. Sheth, and M. **Shahidehpour**, "Geothermal Energy in Power Systems," in Proceedings of the 2004 IEEE General Meeting, Denver, CO., June 2004

34. M. Oloomi Buygi, **M. Shahidehpour**, H. Modir Shanechi, and, G. Balzer "Market based Transmission Planning under Uncertainties," in Proceedings of 2004 IEEE PES PMAPS Conerence., Ames, Iowa, 2004

35. M. Oloomi Buygi, G. Balzer, H. Modir Shanechi, and **M. Shahidehpour**, "Market based Transmission Expansion Planning: Fuzzy Risk Assessment," in Proceedings of 2004 IEEE PES DPRT Conference, Hong Kong, 2004

36. M. Oloomi Buygi, G. Balzer, H. Modir Shanechi, and **M. Shahidehpour**, "Market based Transmission Expansion Planning: Stakeholders' Desires," in Proceedings of 2004 IEEE PES DPRT Conference, Hong Kong, 2004.

37. S. Williamson, A. Emadi, and M. **Shahidehpour**, "Distributed Fuel Cell Generation in Restructured Power Systems," in Proceedings of the 2004 IEEE General Meeting, Denver, CO., June 2004

38. S. Sood, S. Kullanthasamy, and M. **Shahidehpour**, "Power Generation at Brownfields," in Proceedings of the 2004 IEEE General Meeting, Denver, CO., June 2004

39. A. Keyhani and M. **Shahidehpour**, "Integrated Load Management and Solar Energy Systems for a Small Home," in Proceedings of the Power Systems Conference, Tehran, Iran, October 2003

40. S. Bekiarov and M. **Shahidehpour**, "Electricity Restructuring in Bulgaria," in Proceedings of the 2003 IEEE General Meeting, Toronto, Canada, July 2003

41. N. Maricar and M. **Shahidehpour**, "An Object-Oriented Graphical Representation for Engineering Network Analysis in Power System," in Proceedings of the 2003 IEEE General Meeting, Toronto, Canada, July 2003

42. A. Eybalin and M. **Shahidehpour**, "Electricity Restructuring in France," in Proceedings of the 2003 IEEE General Meeting, Toronto, Canada, July 2003

43. R. Ferrero and M. **Shahidehpour**, "Optimal Reserve Allocation and Pricing," in Proceedings of the 2003 IEEE Summer Meeting, Toronto, Canada, July 2003

44. A. Eybalin and M. **Shahidehpour**, "Electricity Restructuring in Iberian Peninsula," in Proceedings of the 2003 IEEE General Meeting, Toronto, Canada, July 2003

45. H. Daneshi and M. **Shahidehpour**, "Application of Fuzzy Dynamic Programming and Neural Network in Generation Scheduling," in Proceedings of the 2003 IEEE Bologna Conference, Bologna, Italy, June 2003

46. M. Oloomi Buygi, H. M. Shanechi, G. Balzer and **M. Shahidehpour**, "Transmission Planning Approaches in Restructured Power Systems," in Proceedings of 2003 IEEE PES Power Tech Conference, Italy, 2003

47. M. Fakhoury, A. Al-Hersh, H. Yamin, and M. **Shahidehpour**, "GUI for Arbitrage by Strategist in the Deregulated Power Markets," in Proceedings of the 2003 LASCOPE Conference, Montreal, Canada, May 2003

48. R. Ferrero, M. **Shahidehpour** and H. Yamin, "Transmission Losses and Constraints in Restructured Power Systems," in Proceedings of the 2003 LASCOPE Conference, Montreal, Canada, May 2003

49. H. Daneshi and M. **Shahidehpour**, "Neural Network Application to Unit Commitment by Gray Code," in Proceedings of 2002 IEEE Transmission and Distribution Conference, Yokohama, Japan, Oct. 2002

50. H. Yamin, K. Al-Tallaq, and M. **Shahidehpour**, "FERC 2000," in Proceedings of LESCOPE, Halifax, Canada, July 2002

51. H. Yamin, K. Al-Tallaq, and M. **Shahidehpour**, "FERC 2000," in Proceedings of the 2002 Large Engineering Systems Conference on Power Engineering, Nova Scotia, Canada, June 2002

52. M. **Shahidehpour**, "Teaching Restructuring Courses at Illinois Institute of Technology," in Proceedings of the 2002 IEEE Summer Meeting, Chicago, IL, July 2002

53. M. **Shahidehpour**, "Distributed Resources for Transmission Congestion and Expansion Planning," in Proceedings of the 2002 IEEE Summer Meeting, Chicago, IL, July 2002

54. M. **Shahidehpour**, "Operational Reliability: Objective or Constraint," in Proceedings of the 2002 IEEE Summer Meeting, Chicago, IL, July 2002

55. A. Sedaghati, H. Shanechi, M. **Shahidehpour**, "Transmission Pricing in Restructured Power Systems," in Proceedings of 10th Iranian Conference on Electrical Engineering, Iran, May 2002

56. A. Sedaghati, H. Shanechi, and M. **Shahidehpour**, "A Novel Method for Allocation of Transmission Network Revenue Requirement in a Competitive Power Market," in Proceeding of the 10th Iranian Conference on Electrical Engineering, Iran, May 2002

57. M. **Shahidehpour**, H. Daneshi, "Market Tools in Electric Power Systems," in Proceedings of 10th International Conference on Electrical Engineering, Tehran, Iran, May 2002

58. R. Ferrero, M. **Shahidehpour**, "Generation Reserve Allocation and Pricing," in Proceedings of the IASTED Conference on Power and Energy Systems, Marina Del Rey, CA, May 2002

59. H. Daneshi, S. Afsharnia, M. **Shahidehpour**, "Applications of ANN to Power Generation Scheduling," in Proceedings of the 16th International Power Systems Conference, Tehran, Iran, Oct. 2001

60. H. Daneshi, S. Afsharnia, M. **Shahidehpour**, "Applications of Fuzzy Sets to Power Generation Scheduling," in Proceedings of the 16th International Power Systems Conference, Tehran, Iran, Oct. 2001

61. S. Zhu, S. Shen, Y. Zhen, Q. Ai, L. Li, and M. **Shahidehpour**, " The Study of genetic Algorithm for Load Modeling," in Proceedings of IPEC 99, Singapore, pp. 787-792, Oct. 1999

62. H. Yamin and M. **Shahidehpour**, "Competitive Energy and Ancillary Service Markets," in Proceedings of the 31st North American Power Symposium, San Luis Obispo, CA, Oct. 1999

63. Alomoush, M., and **Shahidehpour**, M., "Impact of Wheeling Transactions on Zonal Congestion with FTR," in Proceedings of the 1999 Large Engineering Systems Conference on Power Engineering, Nova Scotia, Canada, pp. 231-236, June 1999

64. M. Alomoush and M. **Shahidehpour**, "Exact Extension of Contingency Area using Successive Solutions and Distribution Factors," in Proceedings of the 1999 American Power Conference, Chicago, IL, Apr. 1999

65. N. Maricar and M. **Shahidehpour**, "Visualization Approach to Power System Operation," in Proceedings of the 1999 American Power Conference, Chicago, IL, Apr. 1999

66. H. Yamin and M. **Shahidehpour**, "Risk Management in Electricity Pricing in a Deregulated Power Market Utilizing a Probabilistic Model," in Proceedings of the Third Electrical Engineering Conference, Mutah University, Jordan, Apr. 1999

67. M. Albaijat and M. **Shahidehpour**, "Fuzzy Applications to Power System," in Proceedings of the Third Electrical Engineering Conference, Mutah University, Jordan, Apr. 1999

68. M. Albaijat and M. **Shahidehpour**, "Evolutionary Programming to Solve Optimal Power Flow," in Proceedings of the 1999 American Power Conference, Chicago, IL, Apr. 1999

69. H. Yamin and M. **Shahidehpour**, "An Overview of Ancillary Services and Alternative Auction Designs in a Deregulated Environment," in Proceedings of the 1999 American Power Conference, Chicago, IL, Apr. 1999

70. N. Maricar and M. **Shahidehpour**, "An Object Oriented Programming Approach to Power System Network Analysis Through Visualization," in Proceedings of the Third workshop on Electro-Communication and Information, Japan, Mar. 1999

71. N. Maricar and M. **Shahidehpour**, "Digraph Method: A Graphical Representation for Engineering Network Analysis in Power Systems," in Proceedings of the Third workshop on Electro-Communication and Information, Japan, Mar. 1999

72. H. Yamin, M. **Shahidehpour** and A. Keyhani, "Electricity Pricing Utilizing Transmission Constrained Unit Commitment and Game Theory in a Deregulated Power Marketplace," in Proceedings of 1999 International Conference on System Sciences, Hawaii, Jan. 1999

73. H. Yamin and M. **Shahidehpour**, "Generation Scheduling in an Uncertain Environment for Deregulated Systems Based on Game Theory," in Proceedings of the 1998 Large Engineering Systems Conference on Power Engineering, pp. 311-316, Nova Scotia, Canada, June 1998

74. M. Alomoush and M. **Shahidehpour**, "Decision in a Deregulated Power Environment Based on Fuzzy Approach," in Proceedings of the 1998 Large Engineering Systems Conference on Power Engineering, pp. 305-310, Nova Scotia, Canada, June 1998

75. E. Rezania and M. **Shahidehpour**, "A New Bounding Method for Contingency Analysis using Exact Generalized Real Power Distribution Factor," in Proceedings of the 1998 Large Engineering Systems Conference on Power Engineering, pp. 236-240, Nova Scotia, Canada, June 1998

76. M. Marwali and M. **Shahidehpour**, "Short-Term Transmission Line Maintenance Scheduling," in Proceedings of the 1998 Large Engineering Systems Conference on Power Engineering, pp. 48-53, Nova Scotia, Canada, June 1998

77. J. Kavicky and M. **Shahidehpour**, "Characterizing and Modeling Subarea-Level Energy Transactions," in Proceedings of the 1998 American Power Conference, pp. 441-445, Chicago, IL, April 1998

78. H. Ma and M. **Shahidehpour**, "Transmission Constrained Unit Commitment based on Benders Decomposition," in Proceedings of the 1997 American Control Conference, pp. 104-109, Albuquerque, NM, June 1997

79. J. Kavicky and M. **Shahidehpour**, "Simplifying Generator Siting and Contractor Options," in Proceedings of the 1997 American Power Conference, pp. 120-131, Chicago, IL, April 1997

80. E. Rezania and M. **Shahidehpour**, "A Fast Contingency Screening Method for Determination of Available Transfer Capability in Deregulated Environment," in Proceedings of the 1997 American Power Conference, pp. 104-109, Chicago, IL, April 1997

81. M. Marwali and M. **Shahidehpour**, "A Decomposition Approach to Generation Maintenance Scheduling with Network Constraints," in Proceedings of the 1997 American Power Conference, pp. 104-109, Chicago, IL, April 1997

82. E. Rezania and M. **Shahidehpour**, "Transfer Capability of Power Systems Using an Efficient Predictor-Corrector Primal-Dual Interior Point Algorithm," in Proceedings of Conference on Energy, Electrical Power Systems, water resources and Agriculture, pp. 131-140, New York, NY, Sept. 1996

83. M. Marwali and M. **Shahidehpour**, "Photovoltaic Stand-Alone System Simulation Method for Rural Electrification," in Proceedings of Conference on Energy, Electrical Power Systems, water resources and Agriculture, pp. 117-126, New York, NY, Sept. 1996

84. X. Bai, E. Yu and M. **Shahidehpour**, "Constrained Unit Commitment by Using Tabu Search Algorithm," in Proceedings of 1996 International Conference on Electrical Engineering, pp. 1088-1093, Beijing, China, Aug. 1996

85. R. Ferrero and M. **Shahidehpour**, "Transaction Evaluation in Deregulated Hydro-thermal Systems," in Proceedings of the 1995 American Power Conference, pp. 1713-1719, Chicago, IL, April 1995

86. N. Ong, V. Ramesh and M. **Shahidehpour**, "Parallel Approach for Probabilistic Short-Circuit Studies," in Proceedings of the 1995 American Power Conference, pp. 636-641, Chicago, IL, April 1995

87. N. Ong, C. Beck and M. **Shahidehpour**, "Analysis of Simultaneous Unbalanced Faults Using Three-Port Network Theory," in Proceedings of the 1995 American Power Conference, pp. 642-647, Chicago, IL, April 1995

88. V. Ramesh and M. **Shahidehpour**, "Scheduling Power with Infrastructure Bottlenecks," in Proceedings of NSF Workshop on Electric Power Systems Infrastructure, Pullman, WA, Oct. 1994

89. K. Abdul-Rahman, M. **Shahidehpour** and N. Deeb, "Effect of EMF on Minimum Cost Power Transmission," in Proceedings of 1994 IEEE T&D Conference, Chicago, IL, Apr. 1994

90. K. Abdul-Rahman and M. **Shahidehpour**, "Applications of Artificial Intelligence to Optimal Var Control in Electric Power Systems," in Proceedings of EPRI Conference on Applications of Expert systems in the Power Industry, Phoenix, AZ, Dec. 1993

91. C. Wang and M. **Shahidehpour**, "Optimal Generation Scheduling with Ramping Constraints," in Proceedings of the 1993 Power Industry Computer Applications (PICA) Conference, Phoenix, AZ, May 1993

92. K. Abdul-Rahman and M. **Shahidehpour**, "Application of Fuzzy Sets to Optimal Reactive Power Planning with Security Constraints," in Proceedings of the 1993 Power Industry Computer Applications (PICA) Conference, Phoenix, AZ, May 1993

93. K. Abdul-Rahman and M. **Shahidehpour**, "Optimal Reactive Power Dispatch with Fuzzy Variables," in Proceedings of 1993 IEEE International Symposium on Circuits and Systems, Chicago, IL, May 1993

94. C. Wang, M. **Shahidehpour** and R. Adapa, "Optimal Power Generation Scheduling," in Proceedings of the 1993 American Power Conference, Chicago, IL, April 1993

95. K. Labudda and M. **Shahidehpour**, "A Fuzzy Multi-Objective Approach to Power System State Estimation," in Proceedings of International Conference on Expert System Applications to Power Systems, Melbourne, Australia, Jan. 1993

96. C. Nwankpa and M. **Shahidehpour**, "Effect of Probabilistic Line Outages on Small Disturbance Stability Analysis," in Proceedings of 1992 IEEE International Conference on Systems, Man and Cybernetics, Chicago, IL, Oct. 1992

97. C. Wang and M. **Shahidehpour**, "A Fuzzy Artificial Neural Network for Multi-Area Optimal Power Generation Scheduling with Transmission Losses," in Proceedings of 1992 American Power Conference, Chicago, IL, Apr. 1992

98. C. Wang and M. **Shahidehpour**, "A Fuzzy Set Approach to Tie line Flow Computation in Optimal Power Flow Scheduling," in Proceedings of 1992 American Power Conference, pp. 1443-1450, Chicago, IL, Apr. 1992

99. C. Wang and M. **Shahidehpour**, "Multi-Area Unit Commitment with Ramp Limits," in Proceedings of 1992 American Power Conference, pp. 1075-1083, Chicago, IL, Apr. 1992

100. Z. Ouyang, M. **Shahidehpour** and R. Adapa, "A Hybrid Neural Network Dynamic Programming Algorithm for Multi-Area Generation Scheduling," in Proceedings of 1992 American Power Conference, Chicago, IL, Apr. 1992

101. S. Li, M. **Shahidehpour** and R. Adapa, "Classification of Units in Short-Term Generation Scheduling by Expert Systems," in Proceedings of 1991 EPRI Conference on Expert System Applications for the Electric Power Industry, Boston, MA, Sept. 1991

102. M. **Shahidehpour**, "A Fuzzy Set Approach to Heuristic Power Generation Scheduling with Uncertain Data," in Proceedings of 1991 NSF/EEI Workshop, Norman, OK, July 1991

103. C. Nwankpa and M. **Shahidehpour**, "Analysis of Various Random Perturbations of Transmission Lines in Power System Studies," in Proceedings of 1991 American Control Conference, Boston, MA, June 1991

104. N. Deeb and M. **Shahidehpour**, "Multi-Area Reactive Power Control Using Cross Decomposition," in Proceedings of 1991 American Control Conference, Boston, MA, June 1991

105. M. **Shahidehpour**, "Probabilistic Assessment of Hydrothermal Generation Capacity in a Less Regulated Environment," in Proceedings of NSF Workshop on the Impact of a Less Regulated Utility Environment on Power System Control and Security, Madison, WI, Apr. 1991

106. C. Wang and M. **Shahidehpour**, "Application of Neural Networks in Generation Scheduling with Fuzzy Data," in Proceedings of 1991 American Power Conference, Chicago, IL, Apr. 1991

107. C. Nwankpa and M. **Shahidehpour**, "A New Approach to the Indication of Voltage Collapse in Electric Power Systems," in Proceedings of 1990 Power Systems Computation Conference, Graz, Austria, Aug. 1990

108. C. Nwankpa and M. **Shahidehpour**, "Effect of Small Load Fluctuations on Power System Voltage Stability Studies," in Proceedings of the 1990 American Control Conference, pp. 2106-2110, San Diego, CA, May 1990

109. C. Nwankpa and M. **Shahidehpour**, "A Class of Power Network Reliability Problems Via Colored Noise Modeling," in Proceedings of the 1990 IEEE International Symposium on Circuits and Systems, pp. 164-167, New Orleans, LA, May 1990

110. Z. Ouyang and M. **Shahidehpour**, "Generation Scheduling Decision Supported by Neural Networks," in Proceedings of the 1990 EPRI Conference on Decision Support Methods for the Electric Power Industry, Cambridge, MA, May 1990

111. C. Wang and M. **Shahidehpour**, "Unit Commitment by Neural Networks," in Proceedings of 1990 American Power Conference, Vol. 52, pp. 245-250, Chicago, IL, Apr. 1990

112. M. **Shahidehpour**, "Multi-Stage Unit Commitment by Artificial Neural Networks," in Proceedings of the NSF Workshop on Artificial Neural Networks, pp. 66-70, Clemson, SC, Apr. 1990

113. Z. Ouyang and M. **Shahidehpour**, "Power Generation Scheduling Using an Expert System," in Proceedings of the Sixth IASTED Conference on Expert Systems, pp. 134-137, Los Angeles, CA, Dec. 1989

114. C. Nwankpa and M. **Shahidehpour**, "A Probabilistic Approach to Bulk Power Transmission Reliability," in Proceedings of the 1989 North American Power Symposium, pp. 88-94, Rolla, MO, Oct. 1989

115. A. Behera and M. **Shahidehpour**, "Dynamics of Power Systems in Reliability Studies," in Proceedings of 32nd Midwest Symposium on Circuits and Systems, pp. 268-272, Urbana, IL, Aug. 1989

116. M. **Shahidehpour**, "Power System Restoration-An Expert System Approach," Presented at the 1989 IEEE Power Engineering Society Summer Power Meeting, Long Beach, CA, July 1989

117. C. Nwankpa and M. **Shahidehpour**, "Inclusion of Small Random Perturbations in a Structure Preserving Model for Power System Reliability Studies," in Proceedings of the 1989 IASTED International Conference on Power, pp. 471-475, Valencia, Spain, July 1989

118. N. Deeb and M. **Shahidehpour**, "Modeling of Protection System in Composite Power Systems Reliability Evaluation," in Proceedings of the 16th International RAM Conference for the Electric Power Industry, pp. 415-421, Monterey, CA, June 1989

119. S. Shah and M. **Shahidehpour**, "A Rule Based Load Shedding Strategy in Electric Power Systems," in Proceedings of the EPRI Conference on Expert Systems in Power, Orlando, FL, June 1989

120. S. Tong and M. **Shahidehpour**, "An Innovative Approach to Generation Scheduling in Large- Scale Power Systems with Fuel Constrained Units," in Proceedings of the 1989 IEEE Power Industry Computer Applications Conference, pp. 188-196, Seattle, WA, June 1989

121. N. Deeb and M. **Shahidehpour**, "Calibration of Measurement Sets in an Electric Power System Using an Updated Broyden Method," in Proceedings of the 1989 American Power Conference, Chicago, IL, Apr. 1989

122. N. Deeb and M. **Shahidehpour**, "Economic Allocation of Reactive Power Supply in an Electric Power Network," in Proceedings of the 1989 IEEE International Symposium on Circuits and Systems, pp. 1859-1862, Portland, OR, May 1989

123. M. **Shahidehpour**, "Utilities' Concern for the Design of a Power System Security Analyzer," Presented at the 1988 Annual Meeting of the American Association for Artificial Intelligence, Minneapolis, MN, Aug. 1988

124. S. Shah and M. **Shahidehpour**, "Application of Expert System in the Design of Power System Security Analyzer," in Proceedings of the 1988 IASTED International Conference on Expert System Theory and Applications, pp. 14-18, Geneva, Switzerland, June 1988

125. J. Qiu and M. **Shahidehpour**, "Application of Singular Perturbation in Modeling Load Disturbances and Its Effect on Power Systems Reliability Evaluation," Presented at the 1988 SIAM Annual Meeting, Minneapolis, MN, May 1988

126. S. Shah and M. **Shahidehpour**, "Automated Reasoning: A New Concept in Power System Security Analysis," in Proceedings of the IEEE International Workshop on Artificial Intelligence for Industrial Applications, pp. 58-63, Hitachi City, Japan, May 1988

127. N. Abbasy and M. **Shahidehpour**, "An Overview of Power Systems Static State Estimation," in Proceedings of the 4th International Conference on Advanced Science and Technology, pp. 286-296, Chicago, IL, March 1988

128. N. Abbasy and M. **Shahidehpour**, "Power System State Estimation: A Mathematical Programming Approach," in Proceedings of the 1988 IASTED International Conference on High Tech in Power Industry, pp. 56-61, Tempe, AZ, Feb. 1988

129. S. Shah and M. **Shahidehpour**, "Application of Expert Systems to Power System Security Analysis," in Proceedings of the 49th Annual Meeting of the American Power Conference, pp. 780-788, Chicago, IL, Apr. 1987

130. G. Kraft and M. **Shahidehpour**, "Application of Artificial Intelligence to Distributed Processing in a Power System Environment," in Proceedings of the 6th Power Plant Dynamics, Control and Testing Conference, Knoxville, TN, June 1986

131. J. Banda and M. **Shahidehpour**, "Underground Distribution Surge Protection," in Proceedings of the 48th Annual Meeting of the American Power Conference, pp. 657-664, Chicago, IL, Apr. 1986

132. G. Kraft and M. **Shahidehpour**, "Recovery Techniques in a Distributed Power Environment," in Proceedings of the 1985 Power Plant Digital Control and Fault-Tolerant Microcomputers Conference, (Electric Power Research Institute), Phoenix, AZ, Sept. 1985

133. M. **Shahidehpour**, "Benefits of Interconnection in Three-Area Power Systems, in Proceedings of the 1985 Midwest Power Symposium, Houghton, MI, Oct. 1985

134. F. Samouhi and M. **Shahidehpour**, "Effect of Forced Oscillation on Transient Stability of Power Systems by Direct Method of Liapunov," in Proceedings of the 1984 Midwest Power Symposium, Philadelphia, PA, Oct. 1984

135. M. **Shahidehpour**, J. Tudor and C. Harbourt, "Multi-Area Power Reliability Evaluation," in Proceedings of 1the 1982 Reliability and Maintainability Symposium, pp. 132-137, Los Angeles, CA, Dec. 1982

136. M. **Shahidehpour** and J. Tudor, "Determination of LOLP and the Effect of Tie Capacity on Area Reserve Requirements," in Proceedings of the 1980 Midwest Power Symposium, Purdue University, West Lafayette, IN, Oct. 1980

Research Reports

1. Final Report: EISPC Energy Zones, Published by the National Association of Regulatory Utility Commissioners, **Project funded by the US Department of Energy**; Available at http://www.naruc.org/Grants/Documents/Energy_Zones_Final_Report_Combined_Sections_12_13_2013_FINAL.pdf
2. Final report: Co-optimization of Transmission and Other Supply Resources, Published by the National Association of Regulatory Utility Commissioners, **Project funded by the US Department of Energy**; Available at file:///C:/Users/MS/Downloads/Co-optimization-White-paper_Final.pdf
3. Final Report: Long-term Electric and Natural Gas Infrastructure Requirements, Published by the National Association of Regulatory Utility Commissioners, **Project funded by the US Department of Energy**; Available at http://www.naruc.org/Grants/Documents/EISPC%20Long%20Term%20Electric%20and%20Natural%20Gas%20Infrastructure%20Requirements%20WHITE%20PAPER.pdf
4. Final Report: Load Forecasting Case Study, Published by the National Association of Regulatory Utility Commissioners, **Project funded by the US Department of Energy**; Available at http://www.naruc.org/Grants/Documents/Load%20Forecasting%20Case%20Study%20_%20UNCC.pdf

PROFESSIONAL ACTIVITIES

- IEEE Transactions on Smart Grid (Founding Editor-in-Chief, 2008-2015)
- IEEE PES (Vice President-Publications, 2008-2012)
- IEEE PES Distinguished Lecturer (2004-present)
- IEEE PES Power System Operations Committee (Chair, Vice-Chair, Secretary, 2003-2009)
- IEEE PES Prize Paper Awards Committee (Chair, 2002-2007)
- IEEE PES Operation Methods Subcommittee (Chair, 1996-1998)
- IEEE PES Task Force on Power System Protection Reliability (Chair, 1987-1993)
- IEEE PES Task Forces on Bibliography and Bulk Transmission Reliability (Chair, 1985-1987)
- IEEE PES Subcommittee on Applications of Probability Methods (Secretary, 1984-1989)
- IEEE PES CSEE Yuhsiu Ku Award Committee (Member, 2015-present)
- IEEE PES Chicago Chapter (Seminar Chair, 1986-1987)
- IEEE PES, Chicago Chapter (Program Chair, 1985-1986)
- IEEE Technical Activities Board (Chair, Transactions Committee, 2004-2006)
- IEEE Fellow Committee (Member, 2003-2006)
- IEEE Systems, Man & Cybernetics Society (Chair of the Chicago Chapter, 1992-1993)
- IEEE Region 4 Student Paper Contest (Chair, 1002-1993)
- IEEE Admissions and Advancement Committee (Member, 1992-1993)
- IEEE PowerTech, Netherlands (Member of the Technical Committee, 2015)
- IEEE EUROCON, Croatia (Member of the Technical Committee, 2013)
- IEEE Conference on Signal Processing, Computing and Control (Member of the Tech Com., 2013)
- IEEE CERA Conference, India (Member of the Technical Committee, 2012)
- IEEE Smart Grid Technologies Conference, Washington (General Chair, 2012)
- IEEE PowerTech Conference, France (Member of the Technical Committee, 2013)
- IEEE Great Lakes Symposium on Smart Grid and the New Energy Economy (Chair, 2011-2014)
- IEEE Smart Grid Technologies Conference, Sweden (Member of the Technical Committee, 2010)
- IEEE DRPT (Member of the Advisory Committee of the 2007, China)
- IEEE SMC (Member of the Technical Committee of, Taiwan, 2003-2006)
- IEEE Jordan Conference (Member of the Technical Program Committee, Jordan 2005)
- IEEE PICA Conference (Member of the Technical Committee, 1994-2002)
- IEEE T&D Conference (Member of the Executive Committee, 1993-1994)
- IEEE SMC Conference (Vice-Chair, 1991-1992)
- PSCC (Member of the Technical Committee, Greece, 2011)
- ELECO, Turkey (Member of the Technical Committee of the 2003-2007)
- LASCOPE03, Canada (Member of the Technical Program Committee, 2003)
- American Power Conference, Chicago (Associate Director, 1984-1991)

Activities at National Electrical Engineering Honor Society (HKN)

2007-2011	Chair, Distinguished Service Award Committee
1995-2000	Member of the HKN's Outstanding Professor Award Committee
1993-2000	Member of the HKN's National Board of Directors
1992-1994	President and vice-president of the IIT's Sigma Xi Society

Other Activities

2011	Member of the United Nations Commission on Microgrid Studies

External Examiner of Academic Programs

1. External Reviewer for Promotion and Tenure Cases at University of Manchester, Yarmouk University, Jordan, American University of Beirut, University of Wisconsin, University of Nebraska, University of Missouri, Drexel University, Michigan Technological University, Texas A&M University, Southern Illinois University, Nanyang Tech. University, Singapore, San-Juan University, Argentina, Sultan Qaboos University- Oman, University of California, Tulane University, Michigan State University, New Mexico Tech, Clemson University, Petra University-Malaysia, Mississippi State University, Clarkson University, University of Oklahoma, King Faisal University, Prince Mohammad Bin Fahd University, Seoul National University, University of Bologna, University of New Orleans, University of Florida, University of Texas, University of Saskatchewan, University of Denver.
2. Member of the PhD Board of Examiners, Indian Institute of Technology, (Kanpur, Bombay, Kharagpur), University of Waterloo, San Juan University (Argentina), National Institute of Technology-Kurukshetra, (India), University of Calgary, Swiss Federal Institute of Technology of Lausanne.
3. External Reviewer, American University of Beirut Graduate Degree program in Computer and Communication Engineering
4. External Reviewer of Research Projects at the Kuwait University, University of Petroleum and Minerals in Saudi Arabia
5. Member of the Advisory Board, Center of Advanced Research in Electrified Transportation, Aligarh Muslim University, India (http://www.amucaret.com/international-advisory-board/)

Technical Review Activities

- Technical reviewer (reviewed 900 papers) for IEEE Transactions on Power Systems, IEEE Transactions on Power Delivery, IEEE Transaction on Sustainable Energy, IEEE Transactions on Circuits and Systems, IEEE Transactions on Systems, Man and Cybernetics, IEE Proceedings, Journal of Optimization Theory and Applications, Canadian Electrical and Computer Engineering Journal, International Journal of Electrical Power and Energy Systems, Journal of Optimal Control Applications, Journal of Intelligence Systems Review, Kluwer Publishers, Academic Press Publishing Company, Journal of Electric Machines and Power Systems IFAC Symposium, International Conference on Systems, Man and Cybernetics, Power Industry Computer Applications Conference, International Symposium on Circuits and Systems, American Control Conference, Power System Computation Conference, Journal of Electric Power Systems Research
- Technical reviewer for John Wiley, Qatar Foundation, EPRI, DOE, AFOSR, NSF and ONR (reviewed technical proposals and participated in workshops and review panels)

Technical Sessions Organized at National Meetings

1. Load Management: 1984 American Power Conference, Chicago, IL
2. Environment: 1985 American Power Conference, Chicago, IL
3. System Reliability Evaluation: 1985 IEEE/PES Summer Meeting, Vancouver, Canada
4. Transmission System Reliability: 1986 IEEE/PES Summer Meeting, Mexico City
5. Electrical Transmission: 1986 American Power Conference, Chicago, IL
6. Expert Systems in Power Systems: 1988 International Conference on Expert Systems, Switzerland
7. Production Costing: 1990 IEEE/PES Winter Meeting, Atlanta, GA
8. Power System Operations Topics: 1990 IEEE/PES Winter Meeting, Atlanta, GA
9. Real and Reactive Power Dispatch: 1991 IEEE/PES Summer Meeting, Minneapolis, MN
10. Neural Networks: 1991 American Power Conference, Chicago, IL
11. Bulk Power System Reliability: 1991 IEEE/PES Summer Meeting, San Diego, CA
12. Power Electronics Applications: 1991 North American Power Symposium, Carbondale, IL
13. Real Time Pricing and Optimal Scheduling: 1992 IEEE/PES Winter Meeting, New York, NY
14. System Operations Topics: 1992 IEEE/PES Winter Meeting, New York, NY
15. Advances in Reliability Computation: 1992 IEEE/PES Winter Meeting, New York, NY
16. Power System Economic Evaluation: 1992 IEEE/PES Summer Meeting, Seattle, WA
17. Power Systems Dynamics: 1992 IEEE International Conference on SMC, Chicago, IL
18. Poster Panel Session: 1992 American Power Conference, Chicago, IL
19. Fuzzy Systems: 1993 Conference on Expert Systems Applications to Power Systems, Australia
20. Poster Panel Session: 1993 American Power Conference, Chicago, IL
21. System Operations Topics: 1993 IEEE/PES Summer Meeting, Vancouver, Canada
22. System Operations: 1994 IEEE/PES Winter Meeting, New York, NY
23. Power System Stability: 1994 American Power Conference, Chicago, IL
24. Operations Support-ANN Topics: 1994 IEEE/PES Winter Meeting, New York, NY
25. Hydro Scheduling: 1995 PICA, Salt Lake City, UT
26. Economic Generation Dispatch: 1996 IEEE/PES Summer Meeting, Denver, CO
27. Risk Management in Deregulated Systems: 1996 IEEE/PES Summer Meeting, Denver, CO
28. Unit Commitment: 1997 PICA, Columbus, Ohio
29. State Estimation: 1998 Large Engineering Systems Conference, Halifax, Canada
30. Operation Methods: 1999 IEEE/PES Winter Meeting, New York, NY
31. Hydro Applications: 1999 PICA, Santa Clara, CA
32. Analytical Methods: 1999 PICA, Santa Clara, CA
33. Tools for Restructured Power Systems: 2003 IEEE/PES Annual Meeting, Toronto, Canada
34. Power Market Operations: 2010 IEEE Smart Grid Innovation Technologies, Gaithersburg, MD
35. Storage: 2011 Cigre Conference on Electric Power System of the Future, Bologna, Italy

PERSONAL INFORMATION

Date of birth: July 27, 1955 (Tehran, Iran)
Marital status: Married (three sons, ages 26, 25, and 20)
Citizenship: United States