

MOHAMMAD SHAHIDEHPOUR

Carl Bodine Distinguished Professor and Chairman
Electrical and Computer Engineering Department
Illinois Institute of Technology
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ACADEMIC APPOINTMENTS

Illinois Institute of Technology:

Academic Positions in the Electrical and Computer Engineering Department:

2005-present Carl Bodine Distinguished Professor
1991-2005 Professor
1986-1991 Associate Professor
1983-1986 Assistant Professor

Administrative Positions at Illinois Institute of Technology:

2005-present Chairman, ECE Department
2001-2005 Director, Electric Power and Power Electronics Center
1999-2000 Associate VP for Research and Dean of the Graduate College
1994-1999 Dean of the Graduate College
1993-1994 Associate Dean of Engineering for Research and Graduate Studies
1986-1991 Associate Chairman, Electrical and Computer Engineering Department
1985-1986 Director of Graduate Studies, Electrical and Computer Engineering Department

Other Appointments:

1981-1983 Assistant Professor, Electrical Engineering Department, University of Michigan, Dearborn
1977-1979 Research Fellow, Energy Organization of Iran

Honorary Appointments:

2006-present Honorary Professor, Sharif University of Technology, Iran
2002-present Honorary Professor, North China Electric Power University, Beijing

TEACHING AND RESEARCH INTERESTS

Research Interests: control and optimization of electric power systems, financial markets and electricity restructuring, computational intelligence, decentralized control, large scale optimization and modeling, decision analysis

Publications: 300 technical articles and 5 books; 200 presentations, invited lectures, and conference chairmanship

Research Supervision and Activities: 32 doctoral dissertations, 19 post-doctoral fellows, and 22 Master's thesis students

Technical Courses Taught: Operation and Control of Power Systems, Optimization Theory and Applications, Communication and Control in Power Systems, Advanced Topics in Electric Power Systems, Deregulated Power Systems, Power Systems Planning, Maintenance Scheduling in Power Systems, Control and Stability of Power Systems, Fault Tolerant Power Systems, Power System Reliability, Computational Methods in Power Systems, Market Operations in Power Systems, Power System Analysis, Design and Operation of Electric Machinery, Linear Control Systems, Electromagnetic Theory, Electric Circuits

EDUCATION

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, Kluwer Publishers, May 2000
2. M. **Shahidehpour** and M. Alomoush, Restructured Electrical Power Systems, Marcel Dekker Publishers, 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, Power System Control and Operation, John Wiley and Sons, 2008

HONORS AND AWARDS

- 2007 IEEE/PES T. Burke Hayes Faculty Recognition Award in Electric Power Engineering
- 2008 IEEE/PES Award for Chairing the Working-Group on Power Transmission Planning
- 2007 IEEE/PES Award for Chairing the Working-Group on Aging Power Systems
- 2006 IEEE/PES Award for Chairing the Working-Group on Power Asset Management
- 2005 IEEE/PES Transactions Prize Paper Award
- 2004 IEEE/PSO Transactions Prize Paper Award
- 2003 IEEE Distinguished Lecturer (has made 40 presentations in 25 countries)
- 2003 Sigma Xi Outstanding Senior Research Faculty Award
- 2001 Fellow of IEEE (for contributions to Security Constrained Unit Commitment)
- 2000 National President of HKN (Board President for the EE Honor Society)
- 2000 Outstanding IEEE/PES Subcommittee Award
- 2000 Who's Who in America
- 1999 Technical Paper Award, North American Power Symposium
- 1995 Outstanding IEEE/PES Working Group Award
- 1994 Distinguished Service Award, American Power Conference
- 1993 Listed as one of the 50 R&D Stars to Watch, *Industry Week*
- 1993 Edison Electric Institute's Power Engineering Educator Award
- 1990 C. Holmes MacDonald Outstanding Young Electrical Engineering Professor Award
- 1990 Excellence in Teaching Award at IIT
- 1988 Outstanding HKN Chapter Advisor Award
- 1982 Distinguished Faculty Award, University of Michigan-Dearborn

EDITORIAL BOARD MEMBERSHIP

IEEE Editorial Activities:

2008	Vice President, Technical Publications, IEEE Power Engineering Society
1995-2008	Editor, IEEE Transactions on Power Systems
2008	Guest Editor, IEEE Power and Energy Magazine (Energy Efficiency)
2007	Guest Editor, IEEE Power and Energy Magazine (Transmission System Planning)
2006	Guest Editor, IEEE Power and Energy Magazine (Aging Electricity Infrastructure)
2005	Guest Editor, IEEE Power and Energy Magazine (Asset Management)
2004	Guest Editor, IEEE Power and Energy Magazine (Electricity Market)
2003	Guest Editor, Special Section in IEEE Transaction on Power Systems

Member of Editorial Boards:

2004-present	Member of the Editorial Board, KIEE Journal of Power Engineering (Korea)
2004-present	Member of the Editorial Board, International Journal of Emerging Electric Power
2003-present	Member of the Editorial Board of the IEEE Power and Energy Magazine
2000-2002	Member of the Editorial Board of the HKN Bridge Magazine
2000-2002	Editor, Marcel Dekker Book Series in Power Systems
1998-2002	Member of the Editorial Board of the IEEE CAP Journal
1997-2000	Member of the Editorial Board of the IEEE Transactions on Systems, Man and Cybernetics
1997-present	Member of the Editorial Board of the Journal of Electric Power Systems Research
1997-present	Member of the Editorial Board of the IEEE Power Engineering Letters
1996-2000	Member of the Editorial Board of the Journal of Electric Machines and Power Systems

GRADUATE STUDENTS AND VISITING SCHOLARS

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

1. W. Tian (ongoing) Power System Operation and Planning
2. S. Kamalinia (ongoing) Power System Operation and Planning
3. M. Ghamdi (ongoing) Power System Operation and Planning
4. C. Liu (ongoing) Interdependency of Gas and Electricity in Restructured Power Systems
5. A. Lotfju (ongoing) DC Transmission System for Enhancing Deliverability
6. M. Urbina (2008) Renewable Energy Applications
7. L. Wu (2008) Stochastic Security-Constrained Unit Commitment
8. L. Abreu (2008) Wind Energy Coordination and Control
9. J. Roh (2008) Power System Planning in Restructured Power Systems
10. J. Wang (2007) Market Design Tools in Restructured Power Systems
11. H. Daneshi (2006) Market Simulation in Electric Power Systems
12. Y. Fu (2006) Security-Constrained Operational Planning in Power Systems
13. T. Li (2006) Competition and Risk Management in Power Markets
14. B. Lu (2004) Security-Constrained Unit Commitment with Flexible Operating Conditions
15. Z. Li (2002) Asset Valuation and Risk Analysis in Electric Power Systems
16. H. Yamin (2001) Options for Pricing Ancillary Services in a Deregulated System
17. M. Alomoush (1999) Auctionable Fixed Transmission Rights for Congestion Management
18. E. Rezanian (1998) Contingency Constrained Available Transfer Capability with Real and Reactive Power Limits using an Interior Point Method
19. J. Kavicky (1997) Application of Parallel Path in Transmission Open Access
20. M. Marwali (1997) Transmission and Generation Maintenance Scheduling with Different Time Scales
21. H. Ma (1997) Applications of Decomposition Techniques to Unit Commitment with Transmission Flow and Voltage Constraints
22. R. Ferrero (1997) Application of Game Theory with Incomplete Information to Deregulated Power Systems
23. K. Abdul-Rahman (1994) Applications of Fuzzy Sets to Power Systems Operation and Planning
24. C. Wang (1992) Optimal Generation Scheduling of Large-Scale Hydro-Thermal Power Systems with Uncertain Data
25. C. Nwankpa (1990) Stochastic Models for Power System Dynamic Stability Analysis
26. Z. Ouyang (1990) Application of Artificial Intelligence Techniques to Short Term Electric Power Generation Scheduling
27. N. Deeb (1989) Decomposition Approach to Optimal Reactive Power Dispatch in Large Scale Power Systems
28. S. Tong (1989) Generation Scheduling in Large Scale Hydro Thermal Power Systems with Fuel Constrained Units
29. N. Abbasy (1988) Optimal Set of Measurements for Estimation of System States
30. S. Shah (1988) Expert Systems Application to Power Network Security Analysis

31. J. Qiu (1987) Effect of Random Perturbations on Power Systems Reliability Evaluation
32. X. Shu (1986, with Dr. Meerkov): Vibrational Control in Lumped and Distributed Parameter Systems: Theory and Applications
33. J. Banda (1985) Evaluation of Surge Protection in Underground Distribution Systems Using Zinc Oxide Surge Arresters

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

34. S. Duggirala (2006) Transmission Planning in Restructured Power Systems
35. A. Khan (2006) Wind Speed Forecasting using Wavelets
36. V. Ellia (2005) Agents in Electric Power System Operation
37. D. Patil (2005) Design of Batteries for Electric Cars
38. J. Bui (2005) Hydrogen Economy
39. M. Phadke (2004) Equivalent Energy Function Approach to Photovoltaic-Utility Systems
40. A. Koshi (2004) Superconductors in Electric Power Systems
41. N. Sriram (2004) Biomass in Electric Power Systems
42. A. Joseph (2004) Battery and Storage in Electric Power Systems
43. S. Kullanthasamy (2004) Asset Management in Power Systems
44. S. Sood, (2004) Power Generation at Brownfields
45. S. Sheth (2004) Geothermal Energy in Power Systems
46. R. Pegallapati (2004) Small Hydro as Green Power
47. P. Ganesan (2003) Transmission Management in Restructured Power Systems
48. G. Ponnuvel (2003) Impact of Losses on Transmission Pricing
49. A. Eybalin (2002) Restructuring Models for European Countries
50. S. Sood, (2004) Power Generation at Brownfields
51. M. Albaijat (1999) Optimal Power Flow Calculation with Evolutionary Programming
52. N. Maricar (1998) An Object Oriented Programming Approach to Power System Visualization
53. D. Mardijino (1998) Application of Artificial Neural Networks to Short-Term Load Forecasting
54. M. Marwali (1994) Fuzzy Least Median Square Estimator in Power Systems
55. M. Yesioglo (1993) Adaptive Control of Nonlinear Systems by Artificial Neural Networks
56. K. Labudda (1992) Fuzzy Linear Programming Approach to Power System State Estimation
57. J. Qiu (1985) A New Approach to Power Loss Minimization

Visiting Faculty and Post-doctoral Scholars:

58. Professor J. Choi, Gyeongsang National University, Korea (2007-2009): Power System Planning
59. Professor J. Mantovani, Sao Paulo State University, Brazil (2006-2007): Power System Operation
60. Dr. Y. Fu, GEMS Corporation, (2006-2007): Outage Management in Electricity Markets
61. Dr. T. Li, GEMS Corporation, (2006-2007): Strategic Bidding in Electricity Markets
62. Mr. O. Tor, Middle East Technical University, (2004-2005): Restructuring Models for Turkey
63. Dr. H. Kim, Pusan University, Korea, (2004-2006): Simultaneous Auction of Energy
64. Dr. Z. Li, GEMS Corporation, (2002-2003): Probabilistic Transmission Risk Analysis

65. Dr. Y. Wang, Tianjin University, PRC, (1999-2003): Distributed Energy Management Systems
66. Dr. H. Shanechi, Ferdowsi University, Iran, (2001): Distributed Generation Technologies
67. Dr. M. Alomoush, Yarmouk University of Jordan, (1999-2000): Supervisory Control of a Deregulated Power System
68. Dr. M. Marwali, Agency for the Assessment and Application of Technology, Indonesia, (1998): Reliability-Centered Maintenance Scheduling in Deregulated Power Systems
69. Dr. X. Wang, Harbin Institute of Technology, PRC (1995-1996): Power Systems Voltage Stability
70. Dr. R. Ferrero, University of San Juan, Argentina (1994-1996): Game Theory Applications to Power Systems
71. Prof. S. Zhu, Tsinghua University, PRC (1994-1995): Power Plants Control and Operation
72. Dr. X. Bai, Electric Power Research Institute, Beijing, PRC (1994-1995): Hydro-thermal Power Systems
73. Dr. K. Abdul-Rahman, Siemens Corporation (1993-1994): Optimal Generation Scheduling by Augmented Relaxation Method
74. Dr. I. Roytelman, Kiev Research and Design Institute, Kiev, USSR (1992-1993): Power Distribution Automation Techniques
75. Prof. M. Pourkermani, Technical University of Stuttgart, Germany (1991-1992): Special Purpose Synchronous Machines
76. Dr. S. Li, Research Institute of Electric Light Source Material, Nanjing, PRC (1990-1991): Objected Oriented Graphics in Power Systems
77. Prof. S. Sun, Tsinghua University, PRC (1986-1989): Power Systems Planning Techniques in China

TECHNICAL PUBLICATIONS

Invited Articles:

1. 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, November 2007
2. M. **Shahidehpour**, "Impact of Electricity Markets on Electric Power Systems," 4th International Conference on Electrical and Electronics Engineering, Turkey, December 2005
3. 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
4. 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
5. 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
6. 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
7. 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
8. M. **Shahidehpour** and Yong Fu, "Benders Decomposition," IEEE Power and Energy Magazine, Vol. 3, No. 2, pp. 20-21, March 2005
9. 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, 2004
10. 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, 2004
11. 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
12. M. **Shahidehpour**, "The Business of Power," Guest Editorial, IEEE Power and Energy Magazine, Vol. 2, No. 4, pp. 26-28, July 2004
13. 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
14. M. **Shahidehpour**, F. Schwatz, "Don't Let the Sun Go Down on PV," IEEE Power and Energy Magazine, pp. 40-48, May 2004
15. M. **Shahidehpour**, "Investing in Expansion: The Many Issues that Cloud Electricity Planning," IEEE Power and Energy Magazine, pp. 14-18, Jan 2004
16. E. Rezanian and M. **Shahidehpour**, "Available Transfer Capacity Calculation by Interior Point," IEEE/PICA Tutorial on Applications of Interior Point Method to Power System Operation, 1999
17. 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

18. M. **Shahidehpour** and R. Ferrero, "Electricity Supply Industry," chapter in Wiley Encyclopedia of Electrical and Electronics Engineers, 1999
19. M. **Shahidehpour** and M. Marwali, "Power Transmission Network," chapter in Wiley Encyclopedia of Electrical and Electronics Engineers, 1999
20. 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
21. 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
22. M. **Shahidehpour** and VC Ramesh, "Nonlinear Programming Algorithms and Decomposition Strategies for OPF," chapter in IEEE/PES Tutorial on Optimal Power Flow, 1996
23. M. **Shahidehpour** and C. Wang, "Applications of Artificial Neural Networks in Multi-Area Generation Scheduling with Fuzzy Data," EPRI Publication TR-104219, July 1994
24. 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

Journal Publications:

25. L. Wu and M. **Shahidehpour**, "GENCO s Risk-Constrained Hydrothermal Scheduling," IEEE Transaction on Power Systems, Vol. 23, No. 4, Nov. 2008
26. T. Li and M. **Shahidehpour**, "Interdependency of Natural Gas Network and Power System Security," IEEE Transaction on Power Systems, Vol. 23, No. 4, Nov. 2008
27. H. Yamin and M. **Shahidehpour**, "Risk-Based Self-Scheduling for GenCos in the Day-Ahead Competitive Electricity Markets," European Transactions on Electrical Power, 2008
28. J. Wang, M. **Shahidehpour**, Z. Li, "Security-Constrained Unit Commitment with Volatile Wind Power Generation," IEEE Transaction on Power Systems, Vol. 23, No. 3, Aug. 2008
29. L. Wu and M. **Shahidehpour**, "Cost of Reliability Analysis based on Stochastic Unit Commitment," IEEE Transaction on Power Systems, Vol. 23, No. 3, Aug. 2008
30. O. Tor, A. Guven, and M. **Shahidehpour**, "Congestion-Driven Transmission Planning Considering the Impact of Generator Expansion," IEEE Transaction on Power Systems, Vol. 23, No. 2, pp. 781-790-137, May. 2008
31. L. Wu and M. **Shahidehpour** "GENCO's Risk-Based Maintenance Outage Scheduling," IEEE Transaction on Power Systems, Vol. 23, No. 1, pp. 127-137, Feb. 2008
32. Y. Fu and M. **Shahidehpour**, "Fast SCUC for Large Scale Power Systems," IEEE Transaction on Power Systems, Vol. 22, No. 4, pp. 2144-2151, November 2007
33. T. Li and M. **Shahidehpour**, "Risk-Constrained Generation Asset Arbitrage in Power Systems," IEEE Transaction on Power Systems, Vol. 22, No. 3, pp. 330 – 1339, Aug. 2007
34. Y. Fu, M. **Shahidehpour**, and Z. Li, "Security-Constrained Optimal Coordination of Generation and Transmission Maintenance Outage Scheduling," IEEE Transaction on Power Systems, Vol. 22, No. 3, pp.1302 – 1313, Aug. 2007

35. T. Li and M. **Shahidehpour**, “Dynamic Ramping in Unit Commitment,” IEEE Transaction on Power Systems, Vol. 22, No. 3, pp. 1379-1381, Aug. 2007
36. J. Roh, M. **Shahidehpour**, and Y. Fu, “Security-Constrained Resource Planning in Electricity Markets,” IEEE Transaction on Power Systems, Vol. 22, No. 3, pp. 812 – 820, May 2007
37. L. Wu, M. **Shahidehpour**, and T. Li, “Stochastic Security-Constrained Unit Commitment,” IEEE Transaction on Power Systems, Vol. 22, No. 3, pp. 800 – 811, May 2007
38. T. Li, M. **Shahidehpour**, and Z. Li, “Risk-Constrained Bidding Strategy with Stochastic Unit Commitment,” IEEE Transaction on Power Systems, Vol. 22, No. 1, pp. 449-458, Feb. 2007
39. 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
40. 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
41. Y. Fu, M. **Shahidehpour**, and Z. Li, “AC Contingency Dispatch based on Security-Constrained Unit Commitment,” IEEE Transaction on Power Systems, Vol. 21, No. 2, pp. 897-908, May 2006
42. M. Oloomi, H. Shanechi, G. Balzer, M. **Shahidehpour**, N. Pariz, “Network Planning in Unbundled Power Systems,” IEEE Transaction on Power Systems, Vol. 21, No. 3, pp. 1379-1387, Aug. 2006
43. 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
44. Y. Fu, M. **Shahidehpour**, and Z. Li, “Long-Term Security-Constrained Unit Commitment: Hybrid Dantzig-Wolfe Decomposition and Subgradient Approach,” IEEE Transaction on Power Systems, Vol. 20, No. 4, pp. 2093-2106, Nov. 2005
45. T. Li, M. **Shahidehpour**, and Z. Li, “Price-Based Unit Commitment: A Case of Lagrangian Relaxation Versus Mixed Integer Programming,” IEEE Transaction on Power Systems, Vol. 20, No. 4, pp. 2015-2025, Nov. 2005
46. Y. Fu, M. **Shahidehpour**, and Z. Li, “Security-Constrained Unit Commitment with AC Constraints,” IEEE Transaction on Power Systems, Vol. 20, No. 3, pp. 1538-1550, Aug. 2005
47. T. Li and M. **Shahidehpour**, “Bidding Strategy for FTR Obligations in Transmission Markets,” IEE Proceedings, Vol. 152, No. 3, pp. 422-428, May 2005
48. B. Lu and M. **Shahidehpour**, “Short-term Scheduling of Battery in Grid-Connected PV/ Battery System,” IEEE Transaction on Power Systems, Vol. 20, No. 2, pp. 1053 – 1061, May 2005
49. Z. Li and M. **Shahidehpour**, “Security-Constrained Unit Commitment for Simultaneous Clearing of Energy and Ancillary Services Markets,” IEEE Transaction on Power Systems, Vol. 20, No. 2, pp. 1079-1088, May 2005
50. B. Lu and M. **Shahidehpour**, “Unit Commitment with Flexible Generating Units,” IEEE Transaction on Power Systems, Vol. 20, No. 2, pp. 1022-1034, May 2005
51. T. Li and M. **Shahidehpour**, “Risk-Constrained FTR Bidding Strategy in Transmission Markets,” IEEE Transaction on Power Systems, Vol. 20, No. 2, pp. 1014-1021, May 2005

52. 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
53. T. Li and M. **Shahidehpour**, "Strategic Bidding of Transmission-Constrained GENCOs with Incomplete Information," IEEE Transaction on Power Systems, Vol. 20, No. 1, pp. 437 – 447, Feb. 2005
54. H.Y. Yamin and M. **Shahidehpour**, "Risk and Profit in Self-Scheduling for GenCos," IEEE Transaction on Power Systems, Vol. 19, No. 4, pp. 2104-2105, Nov. 2004
55. M.O. Buygi, G. Balzer, H. Shanechi, M. **Shahidehpour**, "Market-based Transmission Expansion Planning," IEEE Transaction on Power Systems, Vol. 19, No. 4, pp. 2060-2067, Nov. 2004
56. B. Lu and M. **Shahidehpour**, "Short-term Scheduling of Combined Cycle Units," IEEE Transaction on Power Systems, Vol. 19, No. 3, pp. 1616-1625, Aug. 2004
57. H. Yamin, S. Al-Agtash, and M. **Shahidehpour**, "Security-Constrained Optimal Generation Scheduling for GENCOs" IEEE Transaction on Power Systems, Vol. 19, No. 3, pp. 1365-1372, Aug. 2004
58. 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
59. Z. Li and M. **Shahidehpour**, "Generation Scheduling with Thermal Stress Constraints," IEEE Transaction on Power Systems, Vol. 18, No. 4, pp. 1402-1409, Nov. 2003
60. 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
61. 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
62. 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
63. 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
64. E. Rezanian and M. **Shahidehpour**, "Real Power Loss Minimization Using Interior Point," Electric Power and Energy Systems, Vol. 23, pp. 45-56, 2001
65. 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
66. M. Alomoush and M. **Shahidehpour**, "Generalized Model for Fixed Transmission Rights Auction," Electric Power Systems Research, Vol. 29, pp. 207-220, 2000
67. 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
68. 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

69. 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
70. 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
71. 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
72. 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
73. M. **Shahidehpour**, et. al., "The IEEE Reliability Test System," IEEE Transactions on Power Systems, Vol. 14, No. 3, pp. 1010-1020, Aug. 1999
74. H. Ma and M. **Shahidehpour**, "Unit Commitment with Transmission Security and Voltage Constraints," IEEE Transactions on Power Systems, Vol. 14, No. 2, May 1999
75. E. Rezanian 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
76. 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
77. 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
78. 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
79. 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
80. 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
81. 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
82. 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
83. H. Ma and M. **Shahidehpour**, "Unit Commitment with Voltage Constraints," International Journal of Energy Research, Vol. 21, pp. 1385-1398, Nov. 1997
84. R. Ferrero and M. **Shahidehpour**, "Short-term Power Purchases Considering Uncertain Prices," IEE Proc., Vol. 144, No. 5, pp. 423-428, Sept. 1997

85. 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
86. R. Ferrero and M. **Shahidehpour**, "Optimality Conditions in Power Transactions in Deregulated Power Pools," Electric Power Systems Research, Vol. 42, pp. 209-214, 1997
87. 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
88. X. Bai, E. Yu and M. **Shahidehpour**, "Transmission Analysis by Nash Game Method," IEEE Transactions on Power Systems, Vol. 12, No. 3, pp. 1046-1053, August 1997
89. 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
90. 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
91. H. Ma and M. **Shahidehpour**, "Decomposition Approach to Unit Commitment with Reactive Constraints," IEE Proc., Vol. 144, No. 2, pp. 113-117, March 1997
92. R. Ferrero and M. **Shahidehpour**, "Effect of Deregulation on Hydrothermal Systems with Transmission Constraints," Electric Power Systems Research, Vol. 42, pp. 191-197, 1997
93. 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
94. R. Ferrero and M. **Shahidehpour**, "Dynamic Economic Dispatch in Deregulated Systems," Electrical Power and Energy Systems, Vol. 19, No. 7, pp. 433-439, 1997
95. J. Kavicky and M. **Shahidehpour**, "Parallel Path Aspects of Transmission Modeling," IEEE Transactions on Power Systems, Vol. 11, No. 3, pp. 1180-1190, 1996
96. 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
97. 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
98. 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
99. 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
100. 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
101. 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
102. 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

103. 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
104. 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
105. 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
106. 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
107. 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
108. 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
109. 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
110. 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
111. 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
112. 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
113. 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
114. 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
115. 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
116. 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
117. 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
118. 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

119. 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
120. 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
121. 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
122. 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
123. 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
124. 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
125. 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
126. 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
127. 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
128. 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
129. 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
130. 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
131. S. Tong and M. **Shahidehpour**, "Probabilistic Assessment of Hydro-thermal Unit Commitment," Information and Decision Technologies, Vol. 17, pp. 169-187, Aug. 1991
132. 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
133. 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
134. 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
135. 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

136. 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
137. 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
138. 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
139. Z. Ouyang and M. **Shahidehpour**, "Short-Term Unit Commitment Expert System," Electric Power Systems Research, Vol. 20, No. 1, pp. 1-13, Nov. 1990
140. 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
141. 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
142. 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
143. 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
144. 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
145. 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
146. 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
147. 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
148. 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
149. 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
150. 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
151. 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
152. 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

153. 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
154. 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
155. 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
156. 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
157. 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
158. 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
159. 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
160. 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
161. 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:

162. M. **Shahidehpour**, "Transmission Planning in Restructured Systems," IEEE Power and Energy Magazine, Vol. 5, No. 5, pp. 18-22, Sept. 2007
163. M. **Shahidehpour**, "Our Aging Power Systems," IEEE Power and Energy Magazine, Vol. 4, No. 3, pp. 22-23, May 2006
164. 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
165. M. **Shahidehpour**, "Bioengineering Education," Bridge Magazine, p. 17, Jan. 2003
166. M. **Shahidehpour**, "Education of Electricity Restructuring," Bridge Magazine, p. 17, Sept. 2003
167. 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
168. 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
169. I. Roytelman and M. **Shahidehpour**, "Distribution System State Estimation," IEEE Transactions on Power Systems, Vol. 10, No. 1, pp. 237-238, Feb. 1995
170. 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

171. N. Deeb and M. **Shahidehpour**, "Power System Expansion Planning Under Uncertainty," IEEE Transactions on Power Systems, Vol. 8, No. 1, p. 136, Feb. 1993
172. 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
173. 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
174. 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
175. 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
176. N. Deeb and M. **Shahidehpour**, "Security-Constraint Reactive Power Dispatch," IEEE Transactions on Power Systems, Vol. 6, No. 2, p. 117, Feb. 1991
177. 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
178. 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
179. 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
180. 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
181. 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
182. 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
183. 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
184. 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
185. 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
186. 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
187. 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
188. M. **Shahidehpour**, "Expert Systems in Electric Power Systems-A Bibliographical Survey," IEEE Transactions on Power Systems, Vol. 4, No. 4, p. 1362, Oct. 1989
189. 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

190. 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
191. 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:

192. **M. Shahidehpour**, "Stochastic Security-Constrained Unit Commitment," in Proceedings of the 2006 IEEE General Meeting, Tampa, FL, June 2007
193. 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
194. O. Tor and M. **Shahidehpour**, "Power Distribution Asset Management," in Proceedings of the 2006 IEEE General Meeting, Montreal, June 2006
195. A. Joseph and M. **Shahidehpour**, "Battery Storage Systems in Electric Power Systems," in Proceedings of the 2006 IEEE General Meeting, Montreal, June 2006
196. T. Ratajczak and M. **Shahidehpour**, "Emerging Technologies For Coal-Fired Generation," in Proceedings of the 2006 IEEE General Meeting, Montreal, June 2006
197. 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
198. M. **Shahidehpour**, "Simultaneous Energy and Transmission Auction," in Proceedings of the 2005 IEEE General Meeting, San Francisco, CA, June 2005
199. 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
200. S. Sheth and M. **Shahidehpour**, "Tidal Energy in Electric Power Systems," in Proceedings of the 2005 IEEE General Meeting, San Francisco, CA, June 2005
201. S. Sood, Member, 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
202. N. Sriram and M. **Shahidehpour**, "Renewable Biomass Energy," in Proceedings of the 2005 IEEE General Meeting, San Francisco, CA, June 2005
203. O. Tor and M. **Shahidehpour**, "Restructuring in Turkey," in Proceedings of the 2004 IEEE General Meeting, San Francisco, CA, June 2004
204. S. Sheth, and M. **Shahidehpour**, "Geothermal Energy in Power Systems," in Proceedings of the 2004 IEEE General Meeting, Denver, CO., June 2004
205. M. Oloomi Buygi, **M. Shahidehpour**, H. Modir Shanechi, and, G. Balzer "Market based Transmission Planning under Uncertainties," in Proceedings of 2004 IEEE PES PMAPS Conference., Ames, Iowa, 2004
206. 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

207. 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.
208. 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
209. S. Sood, S. Kullanthasamy, and **M. Shahidehpour**, "Power Generation at Brownfields," in Proceedings of the 2004 IEEE General Meeting, Denver, CO., June 2004
210. 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
211. S. Bekiarov and **M. Shahidehpour**, "Electricity Restructuring in Bulgaria," in Proceedings of the 2003 IEEE General Meeting, Toronto, Canada, July 2003
212. 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
213. A. Eybalin and **M. Shahidehpour**, "Electricity Restructuring in France," in Proceedings of the 2003 IEEE General Meeting, Toronto, Canada, July 2003
214. R. Ferrero and **M. Shahidehpour**, "Optimal Reserve Allocation and Pricing," in Proceedings of the 2003 IEEE Summer Meeting, Toronto, Canada, July 2003
215. A. Eybalin and **M. Shahidehpour**, "Electricity Restructuring in Iberian Peninsula," in Proceedings of the 2003 IEEE General Meeting, Toronto, Canada, July 2003
216. M. Oloomi, M. Shanechi, G. Blazer, and **M. Shahidehpour**, "Transmission Planning Approaches in Restructured Power Systems," in Proceedings of the 2003 IEEE Bologna Conference, Bologna, Italy, June 2003
217. 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
218. 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
219. 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
220. 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
221. 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
222. H. Yamin, K. Al-Tallaq, and **M. Shahidehpour**, "FERC 2000," in Proceedings of LESCOPE, Halifax, Canada, July 2002
223. 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

224. M. **Shahidehpour**, "Teaching Restructuring Courses at Illinois Institute of Technology," in Proceedings of the 2002 IEEE Summer Meeting, Chicago, IL, July 2002
225. M. **Shahidehpour**, "Distributed Resources for Transmission Congestion and Expansion Planning," in Proceedings of the 2002 IEEE Summer Meeting, Chicago, IL, July 2002
226. M. **Shahidehpour**, "Operational Reliability: Objective or Constraint," in Proceedings of the 2002 IEEE Summer Meeting, Chicago, IL, July 2002
227. A. Sedaghati, H. Shanechi, M. **Shahidehpour**, "Transmission Pricing in Restructured Power Systems," in Proceedings of 10th International Conference on Electrical Engineering, Tehran, Iran, May 2002
228. M. **Shahidehpour**, H. Daneshi, "Market Tools in Electric Power Systems," in Proceedings of 10th International Conference on Electrical Engineering, Tehran, Iran, May 2002
229. 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
230. 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
231. 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
232. 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
233. 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
234. 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
235. 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
236. N. Maricar and M. **Shahidehpour**, "Visualization Approach to Power System Operation," in Proceedings of the 1999 American Power Conference, Chicago, IL, Apr. 1999
237. 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
238. M. Albaijat and M. **Shahidehpour**, "Fuzzy Applications to Power System," in Proceedings of the Third Electrical Engineering Conference, Mutah University, Jordan, Apr. 1999
239. M. Albaijat and M. **Shahidehpour**, "Evolutionary Programming to Solve Optimal Power Flow," in Proceedings of the 1999 American Power Conference, Chicago, IL, Apr. 1999
240. 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

241. 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
242. 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
243. 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
244. 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
245. 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
246. 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
247. 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
248. 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
249. 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
250. 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
251. 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
252. 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
253. 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
254. 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

255. 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
256. 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
257. 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
258. 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
259. V. Ramesh and M. **Shahidehpour**, “Scheduling Power with Infrastructure Bottlenecks,” in Proceedings of NSF Workshop on Electric Power Systems Infrastructure, Pullman, WA, Oct. 1994
260. 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
261. 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
262. 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
263. 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
264. 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
265. C. Wang, M. **Shahidehpour** and R. Adapa, “Optimal Power Generation Scheduling,” in Proceedings of the 1993 American Power Conference, Chicago, IL, April 1993
266. 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
267. 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
268. 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
269. 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
270. 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

271. 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
272. 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
273. M. **Shahidehpour**, "A Fuzzy Set Approach to Heuristic Power Generation Scheduling with Uncertain Data," in Proceedings of 1991 NSF/EEL Workshop, Norman, OK, July 1991
274. 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
275. N. Deeb and M. **Shahidehpour**, "Multi-Area Reactive Power Control Using Cross Decomposition," in Proceedings of 1991 American Control Conference, Boston, MA, June 1991
276. 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
277. 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
278. 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
279. 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
280. 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
281. 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
282. 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
283. 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
284. 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
285. 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
286. 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

287. 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
288. 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
289. 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
290. 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
291. 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
292. 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
293. 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
294. 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
295. 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
296. 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
297. 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
298. N. Abbasy and M. **Shahidehpour**, "An Overview of Power Systems Static State Estimation," in Proceedings of the 4-th International Conference on Advanced Science and Technology, pp. 286-296, Chicago, IL, March 1988
299. 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
300. 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
301. 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

302. J. Banda and M. **Shahidehpour**, "Underground Distribution Surge Protection," in Proceedings of the 48-th Annual Meeting of the American Power Conference, pp. 657-664, Chicago, IL, Apr. 1986
303. 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
304. M. **Shahidehpour**, "Benefits of Interconnection in Three-Area Power Systems, in Proceedings of the 1985 Midwest Power Symposium, Houghton, MI, Oct. 1985
305. 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
306. M. **Shahidehpour**, J. Tudor and C. Harbourt, "Multi-Area Power Reliability Evaluation," in Proceedings of the 1982 Reliability and Maintainability Symposium, pp. 132-137, Los Angeles, CA, Dec. 1982
307. 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, West Lafayette, IN, Oct. 1980

INDUSTRIAL ACTIVITIES

1983-present Technical consultant for the following firms and organizations: American Transmission Company, GEMS, LCG, New England ISO, Nexant, OM Technologies, KEMA Consulting, Siemens, Amoco, C.E. Neihoff Electric, Commonwealth Edison Company, Exelon, IIT Research Institute, Open Access Technologies, Davis Control Corporation, United Nations

Recent consulting activities include:

Korea Power Exchange, Korea, 2007-present
Power System Planning

Acciona, Chicago, IL, 2008-present
Wind Power Planning

American Transmission Company, Waukesha, WI, 2006-2008
Security-Constrained Unit Commitment
Optimal Transmission Maintenance Scheduling

LCG Consulting, Los Altos, CA, 2007-2008
Security-Constrained Unit Commitment for Greece.

Siemens Energy Automation, Minneapolis, MN, 1994-2008
Security-Constrained Unit Commitment
Optimal Transmission Maintenance Scheduling
Optimal Generation Maintenance Scheduling
Security-Constrained Integrated Maintenance Scheduling

New England ISO, Holyoke, MA, 2006-2007
Security-Constrained Unit Commitment
Optimal Transmission Maintenance Scheduling

Nexant Corporation, San Francisco, CA, 2003-2006
Day-ahead Security-Constrained Unit Commitment with AC Network Constraints
Reliability-Centered Generation and Transmission Maintenance Scheduler
Market Power Monitoring

Exelon Corporation, Chicago, IL, 1990-2002
Probabilistic Transmission Risk Analysis for the ComEd's Control Area

KEMA Consulting, Fairfax, VA, 2001
Evaluation of commercial software capabilities for current and future generation scheduling projects

Open Access Technology International, Inc., 2000
Locational Marginal Price (LMP) Calculation
Inter-zonal and Intra-zonal Congestion Management
Firm Transmission Right (FTR) Auction
Price-based Unit Commitment (PBUC)
Value at Risk (VaR) Calculation

PROFESSIONAL ACTIVITIES

Professional Society and International Conferences Activities:

IEEE Activities

- 2004-2006 Chairman, Transactions Committee, IEEE Technical Activities Board
- 2003-2006 Member, IEEE Fellows Committee

IEEE/PES Activities

- 2008 Vice President, Technical Publications, IEEE Power Engineering Society
- 2003-2009 IEEE/PES Power System Operations Committee (Chair, Vice-Chair, Secretary)
- 2002-2007 Chairman, IEEE/PES Prize Paper Awards Committee
- 1996-1998 Chairman of the Operation Methods Subcommittee of the IEEE/PES
- 1987-1993 Chairman of the IEEE/PES Task Force on Power System Protection Reliability

IEEE/PES Chicago Section Activities

- 1992-1993 Chairman of the Chicago Chapter of IEEE Systems, Man & Cybernetics Society
- 1992-1993 Chairman of the IEEE Region 4 Student Paper Contest
- 1992-1993 Member of the IEEE Admissions and Advancement Committee (Reviewed nominations for the IEEE Senior membership)
- 1986-1987 Seminar Chairman of the Chicago Chapter of the IEEE/PES
- 1985-1986 Program Chairman of the Chicago Chapter of the IEEE/PES
- 1985-1987 Member of the IEEE Task Forces on Bibliography and Bulk Transmission Reliability
- 1984-1989 Secretary of the IEEE/PES Subcommittee on Applications of Probability Methods
- 1983- Present Member of IEEE/PES Subcommittees on Power Systems Control, Power Systems Operation, Power System Economics, Applications of Probability Methods (Chaired / organized 50 technical sessions, presented 200 technical papers and seminars)

International Conferences Activities

- 2007 Member of the Advisory Committee of the DRPT 2007, China
- 2007 Member of the Technical Committee of the ELECO 2007, Turkey
- 2006 Member of the Technical Committee of IEEE SMC, Taiwan
- 2005 Member of the Technical Committee of the ELECO 2005, Turkey
- 2005 Member of the Technical Program Committee of JIEECC05, Jordan
- 2003 Member of the Technical Program Committee of LASCOPE03, Canada
- 2003 Member of the Technical Committee of the ELECO 2003, Turkey
- 2003 Member of the Technical Committee of the IEEE SMC Conference
- 1994-2002 Member of the Technical Committee of the IEEE PICA Conference
- 1993-1994 Member of the Executive Committee of the IEEE T&D Conference
- 1991-1992 Vice-Chairman of the IEEE Systems, Man and Cybernetics Conference
- 1984-1991 Associate Director of the American Power Conference
- 1991-2000 Member of the Advisory Board of the American Power Conference

Invited Talks at Educational Institutions and Industry:

(Mostly as IEEE Distinguished Lecturer and financially supported by the sponsor)

1. Sharif University of Technology, Iran (2008)
2. Cape Peninsula University of Technology, Cape Town South Africa (2008)
3. University of the Witwatersrand, Johannesburg, South Africa (2008)
4. Regulatory Authority for Energy, Athens, Greece, (2007)
5. American Transmission Company, Wisconsin (2007)
6. Electricity Engineers Association of New Zealand, Auckland (2007)
7. University of Auckland, New Zealand (2007)
8. Transpower New Zealand, Ltd, Wellington, New Zealand (2007)
9. Citadel Group, Illinois (2007)
10. American Transmission Company, Wisconsin (2006)
11. University of Waterloo, Canada (2006)
12. Sharif University of Technology, Iran, (2006)
13. Korea Power Exchange, Seoul (2006)
14. IEEE India Power Conference, Delhi (2006)
15. IEEE Qatar Section, Qatar (2006)
16. IEEE Dhahran Section, Saudi Arabia (2006)
17. King Fahd University of Petroleum and Minerals, Saudi Arabia (2006)
18. IEEE Iran Section, Polytechnic University of Tehran, Iran (2006)
19. Grid Management Corporation, Iran (2006)
20. Istanbul Technical University, Turkey (2005)
21. Mohandes Society, Toronto, Canada (2005)
22. University of Ireland (2005)
23. University of London, U.K. (2005)
24. Technical University of Bucharest, Romania (2005)
25. IEEE Chicago Section of PES, Chicago (2005)
26. IEEE Fox Valley Section, Illinois (2004)
27. University of Engineering and Technology, Lahore, Pakistan (2004)
28. Central Electricity Authority HQ, Delhi, India (2004)
29. Indian Institute of Technology, Madras, India (2004)
30. Federation of Andhra Pradesh Chambers of Commerce, Hyderabad, India (2004)
31. Jadavpur University, Calcutta, India (2004)
32. National Power Engineering Conference (keynote Speaker), Malaysia (2003)
33. American University of Beirut, Lebanon (2003)
34. Nexant Corporation, Arizona (2003)
35. OM Corporation, California (2003)
36. California ISO, Sacramento (2003)
37. American Transmission Company, Wisconsin (2003)
38. Sargent and Lundy Corporation, Illinois (2003)
39. Pars Corporation, California (2003)

40. North China Electric Power University, Beijing (2003)
41. Kolej Universiti Teknikal Kebangsaan Maleka, Malaysia (2003)
42. Exelon Corporation, Illinois (2002)
43. Yarmouk University, Jordan (2002)
44. Energy Transmission Company, Jordan (2002)
45. North China Electric Power University, China (2002)
46. Tsinghua University, China (2002)
47. Electric Power Research Institute, China (2002)
48. Tehran University, Iran (2002)
49. Energy Research Center, Ministry of Energy, Iran (2001)
50. Sharif University, Tehran, Iran (2001)
51. Ferdowsi University, Iran (2000)
52. Michigan Technological University (2000)
53. Southern Illinois University (2000)
54. OATI Corporation, Minnesota (1999)
55. Argonne National Laboratory, Illinois (1998)
56. University of Missouri-Rolla, Missouri (1997)
57. San Juan University, Argentina (1996)
58. Commonwealth Edison Company, Illinois (1995)
59. Marquette University, Wisconsin (1994)

Activities at EE National Honor Society (HKN):

- | | |
|--------------|--|
| 2007-present | 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 |

External Examiner of PhD Programs:

- | | |
|--------------|--|
| 2003 | Member of the PhD Board of Examiners, Indian Institute of Technology, (Kanpur, Bombay, Kharagpur), University of Waterloo, San Juan University (Argentina) |
| 2003 | External Reviewer, American University of Beirut Graduate Degree program in Computer and Communication Engineering |
| 1998-present | External Reviewer of Research Projects at the Kuwait University, University of Petroleum and Minerals in Saudi Arabia |
| 1983-present | External Reviewer for Promotion and Tenure Cases at
University of Manchester-Institute of Science and Technology,
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,
San-Juan University, Argentina,
Sultan Qaboos University, Oman
Tulane University,
Michigan State University,
New Mexico Tech,
Clemson University,
Petra University, Malaysia
Nanyang Technical University, Singapore
Mississippi State University

Technical Review Activities:

- 1983-present Technical reviewer (reviewed 800 papers) for IEEE Transactions on Power Systems, IEEE Transactions on Power Delivery, 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
- 1983-present 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