

HYDE M. MERRILL

Technical Publications

1. "A Pattern Recognition Technique for System Error Analysis," *IEEE Trans. on Reliability*, Vol. R-20, No. 3, August 1971, pp. 148-153, (co-author: W.J. Hankley).
2. "Bad Data Suppression in Power System Static State Estimation," *IEEE Trans. on Power Apparatus and Systems*, Vol. PAS-90, No. 6, Nov./Dec. 1971, pp. 2718-2725, (co-author: F.C. Schweppe).
3. "Design of Communication Systems Using Short-Constraint-Length Convolutional Codes," National Telecommunications Conference, Houston, TX, December 1972, (co-author: G.D. Thompson, Jr.).
4. "On-Line System Model Error Correction," Paper No. C 73 106-2, presented at IEEE Winter Power Meeting, New York, January 1973, (co-author: F.C. Schweppe).
5. "Failure Diagnosis Using Quadratic Programming," *IEEE Trans. on Reliability*, Vol. R-22, No. 4, October 1973, pp. 207-213.
6. "Some Applications of Optimization Techniques to Power Systems Problems," *Proceedings IEEE*, Vol. 62, No. 7, July 1974, pp. 959-971, (co-author: A.M. Sasson).
7. "Optimal Generator Maintenance Scheduling Using Integer Programming," *IEEE Trans. on Power Apparatus and Systems*, Vol. PAS-94, No. 5, Sept./Oct. 1975, pp. 1537-1545, (co-author: J.F. Dopazo).
8. "Power Plant Maintenance Scheduling with Integer Programming," IEEE Paper No. 76 CH 1107-2-PWR, presented at IEEE Winter Power Meeting, New York, January 1976.
9. "Objective Criteria for Power Plant Maintenance Scheduling," 3rd Annual Reliability Engineering Conference for the Electric Power Industry, Montreal, September 1976, (co-authors: J.F. Dopazo, D.E. Tuite, and E.L. Stein).
10. "Bus Voltage and Injection Measurements in Power System State Estimation," presented at IEEE PICA Meeting, 1979, (co-authors: A. Aguilar, J.F. Dopazo, and A.M. Sasson).
11. "Power Plant Maintenance Scheduling--A Survey," presented at 42nd American Power Conference, Chicago, April 1980, (co-author: J.F. Dopazo).
12. "Multi-Objective Analysis--A New Methodology for Strategic Planning Applied to Electric Utilities," presented at 8th IFAC Conference, Kyoto, Japan, August 1981, (co-authors: D.C. White, F.C. Schweppe, M.F. Mettler, and D. Aperjis).
13. "Energy Strategy Planning for Electric Utilities, Part I, the SMARTE Methodology," *IEEE Trans. on Power Apparatus and Systems*, Vol. PAS-101, No. 2, February 1982, pp. 340-346, (co-authors: F.C. Schweppe, and D.C. White).
14. "Energy Strategy Planning for Electric Utilities, Part II, SMARTE Methodology Case Study," *IEEE Trans. on Power Apparatus and Systems*, Vol. PAS-101, No. 2, February 1982, pp. 347-355, (co-authors: D. Aperjis, D.C. White, F.C. Schweppe, and M. Mettler).
15. "Cogeneration - A Strategic Evaluation," *IEEE Trans. on Power Apparatus and Systems*, Vol. PAS-102, No. 2, February 1983, pp. 463-471.
16. "Strategic Planning for Electric Utilities: The Application of the SMARTE Methodology," Tenth IMACS World Congress on System Simulation and Scientific Computation, August 8-13, 1982, Montreal, (co-author: F.C. Schweppe).
17. "Electric Utility Strategic Planning: Problems and Analytic Methods," presented at ORSA/TIMS Joint National Meeting, San Diego, October 25-27, 1982, (co-author: F.C. Schweppe).
18. "Strategic Planning for Electric Utilities: Problems and Analytic Methods," *Interfaces*, Vol. 14, No. 1, January & February 1984, pp. 72-83, (co-author: F.C. Schweppe). Also published in *Readings on Strategic Management* (editor: A.C. Hax), Bellinger Publishing Co., Cambridge, MA, 1984.
19. "Strategic Planning: Why do we need it?" *IEEE Trans. on Power Apparatus and Systems*, Vol. PAS-103, No. 7, July 1984, pp. 1592-1598, (co-authors: D. Geraghty, J.W. Lathrop, D.A. Smith, M.D. Whyte).
20. "Transfer Capability Objectives: A Strategic Approach," *IEEE Trans. on Power Apparatus and Systems*, Vol. PAS-104, No. 5, May 1985, pp. 1067-1074, (co-author: M.P. Bhavaraju).
21. "Quick Spreadsheet Corporate Models for Strategic Planning," *IEEE Trans. on Power Systems*, Vol. PWRS-1, No. 3, August 1986, pp. 244-250, (co-author J.W. Feltes).
22. "Trade Off Methods: Resolving Conflicting Objectives," Annual Conference on Business Forecasting, Queens, NY, December 1986.
23. "A Perspective on Planning using Least Cost Techniques," NARUC Winter Meeting, Washington, DC, February 1987, (co-author: W.J. Burke).
24. "Optimizing Plant and System Coal Inventories," *IEEE Transactions on Power Systems*, Vol. 3, No. 1, February 1988, pp. 337-342.
25. "Trade Off Methods in System Planning," *IEEE Transactions on Power Systems*, Vol. 3, No. 3, August 1988, pp. 1284-1290, (co-authors: W.J. Burke, F.C. Schweppe, B.E. Lovell, M.F. McCoy, and S.A. Monohon).
26. "Multiple Objective Trade Off Analysis in Power System Planning," 9th Power Systems Computation Conference, Cascais, Portugal, August-September 1987, (co-author: F.C. Schweppe).

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Technical Publications (continued)

27. "If Pandora's Box is Opened: Pricing Network Access," Joint Meeting, IEEE Power Engineering Society and Gulf Coast Cogeneration Society, Houston, TX, 11 September 1987.
28. "Wheeling - A Primer for Engineers," *Transmission & Distribution*, Vol. 39, No. 10, October 1987, (co-author: F.C. Schweppe).
29. "Creating Data Bases for Power System Planning Using High Order Linear Interpolation," *IEEE Transactions on Power Systems*, Vol. 3, No. 4, November 1988, (co-authors: R. Mukerji, W.J. Burke, and B. Lovell).
30. "Wheeling of Electric Power," Proc. of ESAEI Conference, Wellington, New Zealand, September 1988, (co-authors: A.J. Wood and J.W. Wilson).
31. "The Search for Robust Solutions in Power Expansion Plans," World Bank II Energy Retreat, Arlington, VA, October 1988.
32. "The Trade Off/Risk Method in Power System Planning," presented at the World Bank Seminar, Washington, DC, March 27, 1989.
33. "Least Cost Planning: Issues and Methods," *Proc. of the IEEE*, Vol. 77, No. 6 June 1989, (co-authors: F.C. Schweppe and W.J. Burke).
34. "The Need for a 'Busy' Signal," National Science Foundation Workshop on Research Needs in Power System Operations and Planning, Atlanta, GA, September 1989, (co-author: A.J. Wood).
35. "Risk and Uncertainty in Strategic Planning," National Science Foundation Workshop on Research Needs in Power System Operations and Planning, Atlanta, GA, September 1989, (co-author: A.J. Wood).
36. "Power Plant Maintenance Scheduling for Developing Countries: Reliability and Economic Issues," CIGRE Symposium on Operation of Electric Power Systems in Developing Countries, Bangkok, Thailand, November 1989, (co-author: R. Mukerji).
37. "Wheeling Rates Based on Marginal-Cost Theory," *IEEE Transactions on Power Systems*, Vol. 4, No. 4, November 1989, (co-author: B.W. Erickson).
38. "A Busy Signal for Electric Power," *The Electricity Journal*, Vol. 3, No. 3, April 1990, pp. 50-57, (co-author: A.J. Wood).
39. "Decision Analysis in Maintenance Scheduling: Reliability and Economic Effects," Conference on Decision Support Methods for the Electric Power Industry, Cambridge, MA, May 29-31, 1990, (co-authors: R. Mukerji and B.W. Erickson).
40. "Power Plant Maintenance Scheduling: Optimizing Economics and Reliability," *IEEE Trans. Power Systems*, Vol. 6, No. 2, May 1991, (co-authors: R. Mukerji, B.W. Erickson, J.H. Parker, and R. Friedman).
41. "Risk and Uncertainty in Power System Planning," 10th PSCC Conference, Graz, Austria, August 1990, and *Electrical Power & Energy Systems*, Vol. 13, No. 2, April 1991, (co-author: A.J. Wood).
42. "Multi-Objective Optimization," Tutorial on Advanced Optimization Techniques, Power Industry Computer Applications Conference, May 6, 1991.
43. "What's a PICA, Daddy?" Guest editorial, *IEEE Computer Applications in Power*, Vol. 4, No. 3, July 1991.
44. "Outlook for Electrical Energy from Utilities: 1991-1999," IEEE Petroleum and Chemical Industry Conference, Toronto, Canada, September 1991, (co-authors: R.P. Stratford and C.K. Duffey).
45. "Have I Ever Got a Deal for You . . . Economic Principles in Pricing of Services," Tutorial on Engineering Economic Analysis, IEEE Winter and Summer Power Meetings, 1992. Published in IEEE publication 91EH0345-9-PWR.
46. "The Trade Off/Risk Method: A Strategic Approach to Power Planning," Energy Series Paper No. 52, The World Bank Industry and Energy Department, Washington, DC, May 1992, (co-author: E. Crousillat).
47. "Conflicting Objectives and Risk in Power System Planning," *IEEE Trans. Power Systems*, Vol. 8, No. 3, Aug. 1993, (co-authors: E.O. Crousillat, P. Dörfner, and P. Alvarado).
48. "Playing Leapfrog with a Unicorn: Risk and Uncertainty in Power System Planning," Minnesota Power Systems Conference, St. Paul, MN, October 1992, (co-author: P.D. Fuller).
49. "Least-Cost Planning in Developing Countries," *Public Utilities Fortnightly*, Vol. 131, No. 3, February 1, 1993, (co-authors: E.O. Crousillat, P. Dörfner, and P. Alvarado).
50. "Theoretical Aspects of Interutility Electricity Pricing," Southern Africa Development Community Seminar on Interutility Exchange and Pricing Policies, Lilongwe, Malawi, Aug. 30 - Sept. 1, 1993.
51. "Interutility Electricity Pricing: Theory Versus How to Do It," *Public Utilities Fortnightly*, January 15, 1994.
52. "Electric Power System Planning," *Encyclopedia of Science & Technology*, McGraw-Hill, Inc. (8th, 9th, 10th (2007) Edition).

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Technical Publications (continued)

53. "Costos y Tarifas para Transacciones Multilaterales de Transmisión," VII COTARE (Latin American and Caribbean Conference on Economic Tariffs for Electrical Energy), San Jose, Costa Rica, March 14-19, 1994.
54. "Engineering Issues in Transmission Access and Wheeling," presented at the Transmission & Distribution Conference and Summit Meeting, Arlington, VA, May 23-24, 1994.
55. "Transmission Services under Increased Competition and Privatization," presented at the Probability Methods Applied to Power Systems (PMAPS) Conference, Rio de Janeiro, Brazil, September 26-29, 1994.
56. "The Temple of Doom: Six Paths to Disaster through Mishandling Risk," presented at the Probability Methods Applied to Power Systems (PMAPS) Conference, Rio de Janeiro, Brazil, September 26-29, 1994.
57. "Confessions of a PICAholiC," Guest Editorial, *IEEE Computer Applications in Power*, Vol. 8, No. 1, Jan. 1995.
58. "Transmission Access and Wheeling," *Transmission & Distribution*, Vol. 47, No. 2, February 1995.
59. "Open Access and Network Services - A Global Approach," Proceedings of the 57th American Power Conference, Chicago, IL, April 1995, (co-author: A.S. Cook).
60. "System Operating Impacts of FACTS Technologies," 4th IEEE Conference on Control Applications, Albany, NY, September 1995, (co-authors: J.W. Feltes, B.B. Fardanesh, M.I. Henderson, and R. Adapa).
61. "The Walrus and the Carpenter: Two Views on Network Services for Virtual Utilities," Proceedings of the Symposium on the Virtual Utility, March 31-April 2, 1996, Saratoga Springs, NY, (co-authors: R. Nadira and S.J. Balser). Also published in *The Virtual Utility* (S. Awerbuch and A. Preston, editors), Kluwer Academic Publishers, Boston, MA 1997.
62. "New Age Power System Planning: Risk and Uncertainty in a Competitive Market," presented at Edison Electric Institute Planning Meeting, Las Vegas, NV, April 30, 1996.
63. "Transmission Planning under Uncertainty," presented at CIGRE working group meeting, Paris, France, 10 Oct. 1997.
64. "Probabilistic Available Transfer Capability," presented at IEEE PES Winter Meeting, Tampa, FL, 4 Feb. 1998.
65. "Deregulation, Privatization, and Competition: Transmission Planning under Uncertainty," *IEEE Trans. Power Systems* Vol. 14, No. 2, May 1999 (co-authors: T. De la Torre, J. W. Feltes, and T. Gómez).
66. "Exploiting the Random Nature of Transmission Capacity," *Public Utilities Fortnightly*, Vol. 136, No. 17, Sept. 15, 1998.
67. "Techniques for Power System Planning under Uncertainty," CIGRE TF 38-05-08 Report, November 1998 (co-authors: P. Sandrin, Convener, *et al*).
68. "A Framework for Risk Management," Tutorial on Managing Risk in the New Power Business, IEEE PICA Conf., Santa Clara, CA, May 1999.
69. "Power System Planning," *Electric Power Engineering Handbook*, (L. L. Grigsby, Ed.) CRC Press, 2001.
70. "Wrangling Over RTOs," *Public Utilities Fortnightly*, December 1999.
71. "The RTO Debate," *IEEE Power Engineering Review*, Feb. 2000.
72. "Managing Risk in the New Power Business," *Computer Applications in Power*, April 2000 (co-authors: M. V. F. Pereira and M. F. McCoy).
73. "Regional Transmission Organizations: FERC Order 2000," *IEEE Power Engineering Review*, July 2000.
74. "How Availability Changed in a Competitive Market," *IEEE Power Engineering Review*, Jan 2002 (co-authors: J. A. Natour, C. P. Sedlacek).
75. "Thriving on Risk," *IEEE Computer Applications in Power*, Vol. 15, No. 2, April 2002.
76. "Pieces of the Action," Guest editorial, *IEEE Pwr & Energy Mag.*, Vol. 1 No. 1, Jan/Feb 2003.
77. "Thoughts from Telemachus," Guest editorial, *IEEE Pwr & Energy Mag.*, Vol. 1 No. 4, July/Aug 2003.
78. "Evaluation of Transmission Tariff Methods in Restructured Power Markets," presented at IEEE PES Summer Mtg., July 2003 (co-authors, N. Bacalao, R. Nadira, and C. A. Dortolina).
79. "Developing Power: International Equity, Economics and Electricity," *IEEE Pwr & Energy Mag.*, Vol. 3 No. 2, March/April 2006.
80. "Transmission Icing: A Physical Risk with a Physical Hedge," Invited paper presented at the IEEE PES Gen'l Mtg., Montreal, Canada, June 2006 (coauthor: J. W. Feltes).
81. "Transmission Planning Criteria and their Application under Uncertainty," Invited paper presented at IEEE T&D Conference (pre conference seminar), Bogota, Columbia, 12 August 2008 (coauthors: D. Cámac, R. Bastidas, R. Nadira, C. Dortolina).

82. "Networks, Networks, and Blackouts," Keynote lecture, IEEE T&D Conference, Bogota, Columbia, 14 August 2008.

83. "Transmission Tariffs by Use of System and Economic Benefits," Hawaii Int'l Conf. on System Sciences, Waikoloa, Hawaii, 5-8 January 2009 (coauthors: D. Cámac, R. Bastidas, W. Sifuentes, and R. Tabors).

84. "Expansión del Sistema Eléctrico en Mercados Competitivos (Power System Expansion in Competitive Markets)," Invited paper, 2nd International Meeting on Regulation, CIER, Lima, Peru, 21-22 September 2009.

85. "Transmission Planning in Developing Countries: Criteria and Risks," Presented at panel session on "Transmission Planning and Pricing," IEEE PES 2009 General Meeting, Calgary, Canada, 28 July 2009 (coauthors: D. Cámac, R. Bastidas, R. Nadira, C. Dortolina).

86. "Lecciones Aprendidas en Apagones y su Aplicación en Nuevos Criterios de Planificación (Lessons Learned in Blackouts and their Application in New Planning Criteria)," CEIR Latin America Workshop on Emergency-state Operation of Power Systems, Cuernavaca, Mexico, 27-28 August 2009 (coauthors: J. W. Feltes, D. J. Eckenfelder).

87. "Transmission Planning Criteria and their Application under Uncertainty," *IEEE Trans. Power Systems* Vol. 25, No. 4, Nov. 2010 (coauthors: D. Cámac, R. Bastidas, R. Nadira, C. Dortolina).

88. "Jorge F. Dopazo," 2011 IEEE PES Power Systems Conf. & Exposition, Phoenix, AZ, USA, 20-23 March 2011 (coauthor, A. M. Sasson).

89. "Transmission Technical Analysis: Risks and Conflicts," FERC/RTO Training Meeting, Institute for Policy Integrity, NY University School of Law, New York, NY, 14-15 June 2011.

90. "Learning to Love Congestion," *Public Utilities Fortnightly*, Vol. 150, No. 7, July 2012, pp. 16-23 (coauthor, R. D. Tabors).