

Dr. Omprakash Nayak, P.Eng.

Publications:

1. Om Nayak, Surya Santoso, Paul Buchanan, "Power Electronics Spark New Simulation Challenges", IEEE Computer Application in Power (CAP) Magazine, Vol.15, No.4, October 2002, pp. 37-45.
2. Kazuo Yamamoto, Garth Irwin, Omprakash Nayak, "Combined Iteration Algorithm for Nonlinear Elements in Electromagnetic Transient Simulation", International Conference on Power Systems Transients, (IPST '99), Budapest-Hungary, June 20-24, 1999, pp. 75-80.
3. N.R.Watson, G.D.Irwin, O.B.Nayak, "Controller Modelling in Electromagnetic Transient Studies", International Conference on Power Systems Transients, (IPST '99), Budapest-Hungary, June 20-24, 1999, pp. 544-548.
4. Wade Enright, Neville Watson, Om Nayak, "Three-Phase Five-Limb Unified Magnetic Equivalent Circuit Transformer Models for PSCAD V3", International Conference on Power Systems Transients, (IPST '99), Budapest-Hungary, June 20-24, 1999, pp. 462-467.
5. N.R.Watson, A.M.Gole, G.D.Irwin, O.B.Nayak, "Z-Domain Frequency-Dependent Network Equivalent for Electromagnetic Transients Studies", International Conference on Power Systems Transients, (IPST '99), Budapest-Hungary, June 20-24, 1999, pp. 37-42.
6. W. Enright, O.B. Nayak, G.D. Irwin, J. Arrillaga, "An Electromagnetic Transients Model of Multi-limb Transformers Using Normalized Core Concept", International Conference on Power Systems Transients (IPST '97), Seattle, June 22-26, 1997, pp. 93-98.
7. A.M. Gole, I.T. Fernando, G.D. Irwin, O.B. Nayak, "Modelling of Power Electronic Apparatus: Additional Interpolation Issues", International Conference on Power Systems Transients, (IPST '97), Seattle, June 22-26, 1997, pp. 23-28.
8. IEEE Task Force on Power Electronics Modelling-Digital Simulation Working Group, "Guidelines for Modelling Power Electronics in Electric Power Engineering Applications", IEEE Transactions on Power Delivery, Vol. 12, No. 1, January 1997, pp. 505-514.
9. Y. Zhuang, R.W. Menzies, O.B. Nayak, and H. Turanli, "Dynamic Performance of a STATCON at an HVDC Inverter Feeding a Very Weak AC System", IEEE Transactions on Power Delivery, Vol. 11, No. 2, April 1996, pp. 958-964.
10. G.D. Irwin, O.B. Nayak, A. Neufeld, A.M. Gole, D.A. Woodford, "Designing Controls for Non-linear Systems with Electromagnetic Transients Programs", Proceeding, International Conference on Power Systems Transients (IPST '95), Lisbon, September 3-7, 1995, pp. 431-435.
11. A.M. Gole, G.B. Mazur and O.B. Nayak, "Improvements to Control Sensitivity Index", Proceedings, IEEE/Royal Institute of Technology Stockholm PowerTech: Power Electronics, Stockholm, June 18-22, 1995.
12. A.M. Gole, O.B. Nayak, T.S. Sidhu, and M.S. Sachdev, "A Graphical Electromagnetic Simulation Laboratory for Power Systems Engineering Program", IEEE Transactions on Power Systems, Vol. 11, No. 2, May 1996, pp. 599-606.
13. O.B. Nayak and A.M. Gole, "Effect of Approximations Made in the Lumping of Local Loads at a Weak HVdc Converter on its Dynamic Performance", WESCANEX '95 Conference, Winnipeg, Canada, May 15-16, 1995, Proceedings Vol. 2, pp. 340-343.
14. Omprakash Nayak, Garth Irwin and Arthur Neufeld, "GUI Enhances Electromagnetic Transients Simulation Tools", IEEE Computer Application in Power (CAP) Magazine, Vol.8, No.1, January 1995, pp. 17-22.
15. O.B. Nayak, A.M. Gole, D.G. Chapman, and J.B. Davies, "Control Sensitivity Indices for Stability Analysis of HVDC Systems", IEEE Transactions on Power Delivery, Vol. 10, No. 4, October 1995, pp. 2054-2060.
16. O.B. Nayak, A.M. Gole, D.G. Chapman, and J.B. Davies, "Steady State Stability Analysis of HVDC Systems", Proceedings, 1993 Canadian Conference on Electrical and Computer Engineering, Vancouver, September 14-17, 1993, pp. 807-810.
17. O.B. Nayak, A.M. Gole, D.G. Chapman, and J.B. Davies, "AC/DC System Interaction with Static and Synchronous Compensators at the HVDC Inverter Terminal", Proceedings, International Power Engineering Conference (IPEC '93), Singapore, March 18-19, 1993, pp. 491-496.
18. O.B. Nayak, A.M. Gole, D.G. Chapman, and J.B. Davies, "Dynamic Performance of Static and Synchronous Compensators at an HVDC Inverter Bus in a Very Weak AC System", IEEE Transactions on Power Systems, Vol. 9, No. 3, August 1994, pp. 1350-1358.

19. J. Chand, A.M. Gole and O.B. Nayak, "Control Coordination of Fast Acting Voltage Control Devices - Phase I", Canadian Electrical Association (CEA) Project Report 344-T-752, 1991, pages 40.