

REFERENCES

- [1] C. W. Taylor, *Power System Voltage Stability*, McGraw-Hill, 1994.
- [2] IEEE/PES Power System Stability Subcommittee Special Publication, *Voltage Stability Assessment, Procedures and Guides*, Final Draft, January 1999.
- [3] Survey of voltage collapse phenomenon, *North American Electric Reliability Council Report*, 1991.
- [4] A.G. Phadke and J.S. Thrope, “Synchronized phasor measurements and their applications”, *Springer* 2008.
- [5] G. K. Morison, B. Gao and P. Kundur, “Voltage stability analysis using static and dynamic approaches,” *IEEE Trans. on Power Systems*, vol. 8, no. 3, pp. 1159-1171, August 1993.
- [6] P. A. Lof, T. Smed, G. Anderson and D. J. Hill, “Fast calculation of a voltage stability index,” *IEEE Trans. on Power Systems*, vol. 7, no. 1, pp. 54-64, February 1992.
- [7] Ian Dobson, Fernando A. Alvarado and Christopher L. DeMarco, “Sensitivity of Hopf bifurcations to power system parameters,” in *Proc. 31st IEEE Conference on Decision and Control*, pp. 2928-2933, December 1992, Tucson, Arizona.
- [8] Claudio A. Canizares, “On bifurcations, voltage collapse and load modeling,” *IEEE Trans. on Power Systems*, vol. 10, no. 1, pp.512-522, February 1995.
- [9] B. Gao, G. K. Morison and P. Kundur, “Towards the development of a systematic approach for voltage stability assessment of large scale power

- systems,” *IEEE Trans. on Power Systems*, vol 11, no. 3, pp.1314-1324, August 1996.
- [10] V. Ajarapu, C. Christy, “The continuation power flow: A tool for steady state voltage stability analysis,” *IEEE Transactions on Power Systems*, vol. 7, pp. 416-423, 1992.
- [11] J. Zhao, Y. Wang and P. Xu, “A Comprehensive on-line voltage stability assessment method based on continuation power flow,” *IEEE International Conference on Sustainable Power Generation and Supply (SUPERGEN'09)*, pp. 1-5, 6-7 April 2009, Nanjing, China.
- [12] Scott Greene, Ian Dobson and Fernando L. Alvarado, “Sensitivity of the load margin to voltage collapse with respect to arbitrary parameters,” *IEEE Trans. on Power Systems*, vol 12, no. 1, pp. 262-272, February 1997.
- [13] D. Arias, L. Vargas and C. Rahmann, “WAMS-based voltage stability indicator considering real time operation,” *IEEE Latin America Trans.*, vol. 30, no. 5, May 2015.
- [14] A.G. Phadke, “Synchronized phasor measurement in power system”, *Computer Applications in Power*, vol. 6, no. 2, pp. 10-15, April 1993.
- [15] Abderrahmane Ouadi, Hamid Bentarzi, and Jean Claude Maun, “A new computer based phasor measurement unit framework,” *6th IEEE International Conference on Systems, Signals and Devices*, pp. 1-6, 23-26 March 2009, Djerba.
- [16] T. L. Baldwin, L. Mili, M. B. Jr. Boisen and R. Adapa, “Power system observability with minimal phasor measurement placement,” *IEEE Trans. on power systems*, vol. 8, no. 2, pp. 707-715, May 1993.

- [17] V. Seshadri Sravan Kumar and D. Thukaram, "Approach for multistage placement of phasor measurement units based on stability criterion," *IEEE Trans. on Power Systems*, IEEE early access articles, issue 99, 2015.
- [18] S. Chakrabarti and E. Kyriakides, "Optimal placement of phasor measurement units for power system observability," *IEEE Trans. on Power Systems*, vol. 23, no. 3, pp. 1433-1470, August 2008.
- [19] B. Gou, "Generalized integer linear programming formulation for optimal PMU placement," *IEEE Trans. on Power Systems*, vo. 23, no. 3, pp.1099-1104, August 2008.
- [20] B. Xu. and A. Abur, "Observability analysis and measurement placement for systems with PMUs," *IEEE Power System Conference and Exposition*, vol. 2, pp. 943-946, 10-13 October 2004, New York.
- [21] B. Xu., Y.J. Yoon and A. Abur, "Optimal placement and utilization of phasor measurements for state estimation," *in proceedings 15th Power Syst. Comput. Conf.* pp.1-6, 22-26 August 2005, Belgium.
- [22] D. Dua, S. S. Dambhare, R.K. Gajbhiye and S. A. Soman, "Optimal multistage scheduling of PMU placement: An ILP Approach," *IEEE Trans. on Power Delivery*, vol. 23, no. 4, pp. 1812-1820, October 2008.
- [23] S. Chakrabarti, Kyriakides and D.G. Eliades, "Placement of synchronized measurements for power system observability," *IEEE Trans. on Power Delivery*, vol. 24, no. 1, pp.12-19, January 2009.
- [24] B. Milosevic and M. Begovic, "Non dominated sorting genetic algorithm for optimal phasor measurement placement," *IEEE Trans. on Power Systems*, vol. 18, no. 1, pp. 69-75, February 2003.

- [25] A. M. Almutairi and J. V. Milanovic, "Comparison of different methods for optimal placement of PMUs," *IEEE Bucharest Power Tech Conference*, pp. 1-6, June 28th – July 2009, Bucharest, Romania.
- [26] Xiaoming, Weixing and Zhimin Li, "PMU Placement for voltage stability assessment and monitoring of power systems," *IEEE 7th International Conference on Power Electronics and Motion Control (IPEMC)*, vol. 2, pp. 1488-1498, 2-5 June 2012, Harbin, China.
- [27] Anamitra Pal, Gerardo A. Sanchez-Ayala, Virgilio A. Centeno and James S. Thorp, "A PMU placement scheme ensuring real-time monitoring of critical buses of the network," *IEEE Trans. on Power Delivery*, vol. 29, no. 2, pp. 510-517, April 2014.
- [28] Antonio C. Zambroni de Souza, Julio C. Stacchini de Souza and Armando M. Leite da Silva, "On-line voltage stability monitoring," *IEEE Trans. on Power Systems*, vol. 15, no. 4, pp.1300-1305, November 2000.
- [29] Enrico De Tuglie, Maria Dicorato, Massimo La Scala and Pierangelo Scarpellini, "A corrective control for angle and voltage stability enhancement on the transient time-scale," *IEEE Trans. on Power Systems*, vol. 15, no. 4, pp. 1345-1353, November 2000.
- [30] M. Zhou, V. A. Centeno, J. S. Thorp and A. G. Phadke, "An alternative for including phasor measurements in state estimators," *IEEE Trans. on Power Systems*, vol. 21, no. 4, pp. 1930-1937, November 2006.
- [31] Ivan Smon, Gregor Verbic and Ferdinand Gubina, "Local voltage-stability index using Tellegen's theorem," *IEEE Trans. on Power Systems*, vol. 21, no. 3, pp. 1267-1275, August 2006.

- [32] Sandro Corsi and and Glauco N. Taranto, “A real-time voltage instability identification algorithm based on local phasor measurements,” *IEEE Trans. on Power Systems*, vol. 23, no. 3, pp. 1271-1279, August 2008.
- [33] Jaime De La, Virgilio Centeno, James S. Thorp and A.G. Phadke, “Synchronized phasor measurement applications in power systems,” *IEEE Trans. on Smart Grid*, vol. 1, no. 1, pp. 20-27, June 2010.
- [34] James A. Momoh, Yan Xia and Garfield Boswell, “Voltage stability enhancement using phasor measurement unit (PMU) technology,” *IEEE Conference on Power Symposium, NAPS’08*, pp. 1-6, 28-30 September 2008, North America.
- [35] Y. Gong and N. Schulz, “Synchrophasors based real-time voltage stability index,” *IEEE Power System Conference & Exposition*, pp. 1026-1036, 2006, Atlanta.
- [36] Mevludin and Thierry Van Cutsem, “Wide-area detection of voltage instability from synchronized phasor measurements. Part I: Principle,” *IEEE Trans. on Power Systems*, vol. 24, no. 3, pp. 1408-1416, August 2009.
- [37] W. Du, Z. Chen, H. F. Wang and R. Dunn, “Feasibility of online collaborative voltage stability control of power systems,” *IET Generation, Transmission and Distribution*, vol. 3, issue 2, pp. 216-224, 2009.
- [38] Ramon A. Leon, Jorge W. Gonzalez, Gabriel J. Lopez and Idi I. Isaac, “Proposal for online voltage stability assessment using Phasor Measurement Units,” *IEEE Transmission and Distribution Conference and Exposition*, pp. 793-797, 8-10 November 2010, Sao Paulo, Latin America.

- [39] S. Sahari, A. F. Abidin and T. K. Abdul Rahman, "Development of artificial neural network for voltage stability monitoring," *Proceedings of National Power and Energy Conference (PECon)*, pp. 37-42, 15-16 December 2003, Bangi, Malasiya.
- [40] Bansilal, D. Thukaram and K. Hrish Kashyap, "Artificial neural network application to power system voltage instability improvement," *IEEE Conference on Convergent Technologies for the Asia-Pacific Region (TENCON 2003)*, pp. 53-57, 15-17 October 2003, Bangalore, India.
- [41] B. Suthar and R. Balasubramanian, "A novel ANN based method for online voltage stability assessment," *International IEEE Conference on Intelligent System Applications to Power Systems (ISAP)*, pp. 1-6, 5-8 November 2007, Toki Messe, Niigata.
- [42] B. Suthar and R. Balasubramanian, "A new approach to ANN- based real time voltage stability monitoring and reactive power management," *IEEE TENCON 2008*, pp. 1-6, 19-21 November 2008, Hyderabad, India.
- [43] Debbie Q.Zhou, U.D.Annakkage and Athula D.Rajapakse, "Online monitoring of voltage stability margin using an artificial neural network," *IEEE Trans. on Power Systems*, vol.25, no.3, pp.1566-1574, August 2010.
- [44] W. Nakawiro and I. Erlich, "Online voltage stability monitoring using artificial neural network," *IEEE Conference on Electric Utility Deregulation and Restructuring and Power Technologies*, pp. 941-947, 6-9 April 2008, Nanjuing.
- [45] Herbert Innah and Takashi Hiyama, "Neural network method based on PMU data for voltage stability assessment and visualization," *IEEE Conference TENCON*, pp. 822-827, 21-24 November 2011, Bali, Indonesia.

- [46] K.S. Sajan, Barjeev Tyagi and Vishal Kumar, “Genetic algorithm based artificial neural network model for voltage stability monitoring,” *IEEE 18 th National Power System Conference (NPSC)*, pp. 1-5, 18-20 December 2014, Guwahati, India.
- [47] Constantin BULAC, Ion TRISTIU, Alexandru MANDIS and Lucian TOMA, “On-line power systems voltage stability monitoring using artificial neural networks,” *9th International Symposium on Advanced Topics in Electrical Engineering*, pp. 622-625, May 7-9, 2015, Bucharest, Romania.
- [48] S. Chakrabarti and B. Jeyasurya, “Online voltage stability monitoring using artificial neural network,” *IEEE Large Engineering System Conference on Power Engineering (LESCOPE)*, pp. 71-75, 28-30 July 2004, Canada.
- [49] B. Avramovic and L. K. Fink, “Real-time reactive security monitoring,” *IEEE Trans. on Power Systems*, vol. 7, pp. 432–437, Feb. 1992.
- [50] L. Sandberg, K. Rouden and Ekstam, “Security assessment against voltage collapse based on real-time data including generator reserve capacity,” in *CIGRÉ, 1994, Paper 39/11-03*.
- [51] C. W. Taylor and R. Ramanathan, “BPA reactive power monitoring and control following the August 10, 1996 power failure,” in *Proc. VI Symp. Specialists Elect. Oper. Expansion Planning*, Salvador, Brazil, May 24–29, 1998.
- [52] Lixin Bao, Zhenyu Huang and Wilsun Xu, “Online voltage stability monitoring using Var reserves,” *IEEE Trans. on Power Systems*, vol. 18, no. 4, pp. 1461-1469, November 2003.

- [53] D. J. Hill, P. A. Lof and G. Anderson, "Analysis of long-term voltage stability," *Proc. 10th Power Systems Computation Conference*, pp. 1252-1259, August 1990.
- [54] Survey of voltage collapse phenomenon, *North American Electric Reliability Council Report*, 1991.
- [55] DING Xiaoqun, ZHOU Ling and Liu Hongliang, "AVC system based on online voltage stability monitoring system," *Universities Power Engineering Conference (UPEC)*, pp. 1-5, 1-4 September 2008, Padova.
- [56] Bruno Leonardi, Venkataramana Ajarapu, Mirodrag Djukanovic and Pei Zhang, "A practical two-stage online voltage stability margin estimation method for utility-scale systems," *IEEE Power and Energy Society General Meeting*, pp. 1-9, 24-29 July 2011, San Diego, CA.
- [57] Bruno Leonardi and Venkataramana Ajarapu, "Development of multilinear regression models for online voltage stability margin estimation," *IEEE Trans. on Power Systems*, vol. 26, no. 1, pp. 374-383, February 2011.
- [58] Y. Gong and N. Schulz, "Synchronphasors based real-time voltage stability index," *IEEE Power System Conference & Exposition*, pp. 1026-1036, 2006, Atlanta.
- [59] Sangwook Han, B. Lee, S. Kim, Y. Moon, B. Chang and J. Shin, "Voltage stability monitoring using PMU data in KEPCO system," *IEEE Conference in Transmission and Distribution Conference and Exposition*, pp. 1-5, 19-22 April 2010, New Orleans, LA, USA.

- [60] Yunfei Wang, Iraj Rahimi Pordanjani, Weixing Li, Wilsun Xu, Tongwen Chen, Ebrahim Vaahedi and Jim Gurnev, "Voltage stability monitoring based on the concept of coupled single-port circuit," *IEEE Trans. on Power Systems*, Vol. 26, No. 4, pp. 2154-2163, November 2011.
- [61] Vahid Salehi and O. Mohammed, "Real-time voltage stability monitoring and evaluation using synchrophasors," *IEEE conference on North American Power Symposium (NAPS)*, pp. 1-7, 4-6 August 2011, Boston MA.
- [62] Himanshu S. Hirlekar and Badrul H. Chowdhury, "Towards on-line voltage stability assessment using synchrophasors," *IEEE Power and Energy Society General Meeting*, pp.1-6, 22-26 July 2012, San Diego, CA.
- [63] S. Keshewani, Satyendra P. Singh, S. P. Singh, "Voltage stability assessment using phasor measurement units in power network with full system observability," *2nd International Conference on Power, Control and Embedded Systems*, pp. 1-6, 17-19 Decemebr 2012, Allahabad, India.
- [64] Sobhy M. Abdelkader and D. John Morrow, "Online tracking of Thévenin equivalent parameters using PMU measurements," *IEEE Trans. on Power Systems*, Vol.27, No.2, pp. 975-983, May 2012.
- [65] Sandeep Soni, Sudhir Bhil, Dharendra Mehta and Sushama Wagh, "Linear state estimation model using phasor measurement unit (PMU) technology," *IEEE 9th International Conference in Computer Science and Automatic Control*, pp. 1-6, 26-28 September 2012, Maxico City.
- [66] H. Khoshkhoo and S.M. Shahrtash, "On-line small disturbance voltage stability assessment in power systems based on wide area measurement," *IEEE 10th*

- International Conference on Environment and Electrical Engineering (EEEIC)*, pp. 1-5, 8-11 May 2011, Rome.
- [67] Izham Z. Abidin, Keem Siah, Yap, Nira Saadun, Sheikh Kamar Sheikh Abdullah, Mohd Khairun and Nizam Mohd Sarmin, "MOSELM approach for voltage stability indicator using phasor measurement units," *IEEE International Conference on Power and Energy (PECon)*, pp. 510-514, 2-5 December 2012, Kota Kinabalu Sabah, Malaysia.
- [68] S. Corsi and G. N. Taranto, "A real time voltage instability identification algorithm based on local phasor measurements," *IEEE Trans. on Power Systems*, vol. 23, no. 3, pp. 1271-1279, August 2008.
- [69] M. Beiraghi and A. M. Ranjbar, "Online voltage security assessment based on wide-area measurements," *IEEE Trans. on Power Delivery*, vol. 28, no. 2, pp. 989-997, April 2013.
- [70] Sambarta Dasgupta, Magesh Paramasivam, Umesh Vaidya and Venkataramana Ajjarapu, "Real-time monitoring of short-term voltage stability using PMU data," *IEEE Trans. on Power Systems*, vol. 28, no.4, pp. 3702-3711, 2013.
- [71] Dinh Thuc Duong and Kjetil Uhlen, "Online voltage stability monitoring based on PMU measurements and system topology," *3rd International Conference on Electric Power and Energy Conversion Systems*, pp.1-6, October 2-4, 2013, Yildiz Technical University, Istanbul, Turkey.
- [72] Junjie Tang, Junqi Liu, Ferdinanda Ponci and Antonello Monti, "Adaptive load shedding based on combined frequency and voltage stability assessment using

- synchrophasor measurements,” *IEEE Trans. on Power Systems*, vol. 28, no. 2, pp. 2035-2047, May 2013.
- [73] Haoyu Yuan and Fangxing Li, “A comparative study of measurement based Thevenin equivalents identification methods,” *North American Power Symposium (NAPS)*, pp. 1-6, 7-9 September 2014, Pullman, WA.
- [74] K. Joseph. Makasa and Ganesh K. Venayagamoorthy, “Online voltage stability load index estimation based on PMU measurements,” *IEEE Power and Energy Society General Meeting*, pp.1-6, 24-29 July 2011, San Diego, CA.
- [75] Sk. Razibul Islam, D. Sutanto and K. M. Muttaqi, “Coordinated decentralized emergency voltage and reactive power control to prevent long-term voltage instability in a power system,” *IEEE Trans. on Power Systems*, vol. 30, no. 5, pp. 2591-2603, September 2015.
- [76] N. G. Hingorani and L. Gyugyi, “Understanding FACTS: Concepts and technology of flexible AC transmission system,” *IEEE Press*, New York, 2000.
- [77] P. Mishra, H.N. Udupa and P. Ghune, “Calculation of sensitive node for IEEE 14-bus system when subjected to various changes in load,” *In Proceedings of IRAJ International Conference*, 21st July, 2013.
- [78] P. Kundur, “Power System Stability and Control,” *Mc Graw-Hill*, 1993.
- [79] Sanivarapu, Nagalakshmi, R. Kalaivani, and Dr. S .R. Paranjothi, “Optimal location of STATCOM to improve voltage stability using PSO,” *International Journal of Advanced Engineering and Technology*, vol. 2, no. 4, 2011.

- [80] J. Vishnu et. al., "A strategy for optimal loading pattern of a typical power system- A case study," *International Conference on Advances in Green Energy (ICAGE)*, pp. 112-117, December 17-18, 2014, Trivandrum, India.
- [81] K. E. Martin et al, "Exploring the IEEE standard C37.118-2005 synchrophasors for power systems," *IEEE Trans. on Power Systems*, vol. 23, no. 4, pp. 1805-1811, October 2008.
- [82] A. Exposito and A. Abur, "Generalized observability analysis and measurement classification," *IEEE Trans. on Power Systems*, vol. 13, no. 3, pp. 1090-1095, August 1998.
- [83] A. B. Antonio, J. R. A. Torreao and M. B. Do Coutto Filho, "Meter placement for power system state estimation using simulated annealing," *Proc. of the IEEE Porto Power Tech Conference*, vol. 3, pp. 1-5, September 10-13, 2001, Porto, Portugal.
- [84] H. Mori and Y. Sone, "Tabu search based meter placement for topological observability in power state estimation," *Proc. of the IEEE Transmission and Distribution Conference*, vol. 1, pp. 172-177, April 11-16, 1999, Kawasaki, Japan.
- [85] B. Milosevic and M. Begovic, "Nondominated sorting genetic algorithm for optimal phasor measurement placement," *IEEE Trans. on Power Systems*, vol. 18, no. 1, pp. 69-75, February 2003.
- [86] I. Kamwa, A. Pradhan and G. Joos, "Automatic segmentation of large power systems into fuzzy coherent areas for dynamic vulnerability assessment," *IEEE Trans. on Power Systems*, vol. 22, no. 4, pp. 1972-1985, November 2007.

- [87] D. Thukaram, B. Ravikumr, V. Seshadri Sravan Kumar, Y. Prasad Rao, S. Surendra and S. R. Kolla, "Real time monitoring of critical nodes with minimal number of phasor measurement units," *IEEE International Conference on Power Systems (ICPS-2009)*, pp. 1-6, December 27-29, 2009, Kharagpur, India.
- [88] V. Madani, M. Parashar, J. Giri, S. Durbha, F. Rahmatian, D. Day, M. Adamiak and G. Sheble "PMU placement considerations- A roadmap for optimal PMU placement," *IEEE/PES Power System Conference and Exposition (PSCE)*, pp. 1-7, March 20-23, 2011, Arizona, USA.
- [89] M. Rios and O. Gomez, "Identification of coherent groups and PMU placement for inter-area monitoring based on graph theory," *IEEE/PES International Conference on Innovative Smart Grid Technologies (ISGT)*, pp. 1-7, October 19-21, 2011, Colombia, Latin America.
- [90] R. Emami and A. Abur, "Robust measurement design by placing synchronized phasor measurements on network branches," *IEEE Trans. on Power Systems*, vol.25, no. 1, pp. 38-43, February 2010.
- [91] V. Kekatos, G. Giannakis and B. Wollenberg, "Optimal placement of phasor measurement units via convex relaxation," *IEEE Trans. on Power Systems*, vol. 27, no. 3, pp. 1521-1530, August 2012.
- [92] Nikolaos M. Manousakis and George N. Korres, "Optimal PMU placement for numerical observability considering fixed channel capacity—A semidefinite programming approach," *IEEE Trans. on Power Systems*, vol. 31, no. 4, pp. 3328-29, July 2016.

- [93] R. F. Nuqui and A. G. Phadke, "Phasor measurement unit placement techniques for complete and imcomplete observability," *IEEE Trans. on Power Delivery*, vol. 20, no. 4, pp. 2381-2388, October 2005.
- [94] B. Zou, "Optimal placement of PMUs by integer linear programming," *IEEE Trans. on Power Systems*, vol. 23, no. 3, pp.1525-1526, August 2008.
- [95] Ranjana Sodhi, S. C. Srivastava and S. N. Singh, "Optimal PMU placement to ensure system observability under contingencies," *IEEE Power and Energy Society General Meeting (PES'09)*, pp. 1-6, July 26-30, 2009, Calgary, Canada.
- [96] A. Pal, G. A. Sanchez-Ayala, V. A. Centeno and J. S. Thorp, "A PMU placement scheme ensuring real time monitoring of critical buses of the network," *IEEE Trans. on Power Delivery*, vol. 29, no. 2, pp. 510-517, April 2014.
- [97] M. B. Mohammadi, Rahmat-Allah Hooshmand and F. H. Fesharaki, "A new approach for optimal placement of PMUs and their required communication infrastructure in order to minimize the cost of the WAMS," *IEEE Trans. on Smart Grid*, vol. 7, no. 1, pp. 84-93, January 2016.
- [98] Anamitra Pal, Chetan Mishra, Anil Kumar S. Vullikanti and S.S. Ravi, "General optimal substation coverage algorithm for phasor measurement unit placement in practical systems," *IET Generation, Transmission & Distribution*, vol. 11, no. 2, pp. 347-353, 2017.
- [99] Sanjay Kumar, Barjeev Tyagi, Vishal Kumar and Sunita Chohan, "Incremental PMU placement considering reliability of power system network using

- analytical hierarchical process, ” *IET Generation, Transmission and Distribution*, vol. 12, no. 16, pp. 3900-3909, 2018.
- [100] M. Parniani, J.H. Chow, L. Vanfretti, B. Bhargawa and A. Salazar, “Voltage stability analysis of a multiple-infeed load centre using phase measurement data,” in *Proceedings of Power System Conference and Exposition*, pp. 1299-1305, 29 October-1 November 2006, Atlanta, GA, USA.
- [101] S. M. Abdelkader and D. J Morrow, “Online tracking of Thevenin equivalent parameters using PMU measurements,” *IEEE Trans. on Power Systems*, vol. 27, no. 2, pp. 975-983, May 2012.
- [102] I. Smon, G. Verbic and F. Gubina, “Local voltage stability index using Tellegen’s theorem,” *IEEE Trans. on Power Systems*, vol. 21, no. 3, pp. 1267-1275, August 2006.
- [103] M. Glavic and T. Van Cutsem, “Wide-area detection of voltage instability from synchronized phasor measurements. Part II: simulation results,” *IEEE Trans. on Power Systems*, vol. 24, no. 3, pp. 1417-1425, August 2009.
- [104] Xing Liu, Xun Zhang and V. Venkatasubramanian, “Distributed voltage security monitoring in large power systems using synchrophasors,” *IEEE Trans. on Smart Grid*, vol. 7, no. 2, pp. 982-991, March 2016.
- [105] Haoen Li, Anjan Bose and V. Venkatasubramanian, “Wide-area voltage monitoring and optimization,” *IEEE Trans. on Smart Grid*, vol. 7, no. 2, pp. 785-793, March 2016.

- [106] Costas D. Vournas, Charalambos Lambrou and Marios Kanatas, "Application of local autonomous protection against voltage instability to IEEE test systems," *IEEE Trans. on Power Systems*, vol. 31, no. 4, July 2016.
- [107] Fengkai Hu, Kai Sun, Alberto Del Rosso, Evangelos Farantatos and Navin Bhatt, "Measurement-based real-time voltage stability monitoring for load areas," *IEEE Trans. on Power Systems*, vol. 31, no. 4, pp. 2787-2798, July 2016.
- [108] C. Canizares and F. Alvarado, "Point of collapse and continuation methods for large ac/dc systems," *IEEE Trans. on Power Systems*, vol. 8, no. 1, pp. 1-8, February 1993.
- [109] G. C. Ejebe, G. D. Irisarri, S. Mokhtari, O. Obadina, P. Ristanovic and J. Tong, "Methods for contingency screening and ranking for voltage stability analysis of power systems," *IEEE Trans. on Power Systems*, vol. 11, no. 1, pp. 350-356, February 1996.
- [110] Yiwei Qiu, Hao Wu, Yongzhi Zhou and Yonghua Song, "Global parametric polynomial approximation of static voltage stability region boundaries," *IEEE Trans. on Power Systems*, vol. 32, no. 3, pp. 2362-2371, May 2017.
- [111] V. Ajjarapu and B. Lee, "Bibliography on voltage stability," *IEEE Trans. on Power Systems*, pp. 115-125, vol. 13, no. 1, February 1998.
- [112] Bruno Leonardi and Venkataramana Ajjarapu, "Development of multi linear regression models for online voltage stability margin estimation," *IEEE Trans. on Power Systems*, pp. 374-383, vol. 26, no. 1, February 2011.

- [113] F. Aminifar et al, “Synchrophasor measurement technology in power systems: panorama and state-of-the-art” *IEEE Access*, pp. 1607-1628, vol. 2, 2014.
- [114] K. Vu et. al., “Use of local measurements to estimate voltage stability margin,” *IEEE Trans. on Power Systems*, vol. 14, no. 3, pp. 1029-1035, August 1999.
- [115] H. Y. Su and C. W. Liu, “Estimating of voltage stability margin using PMU measurements,” *IEEE Trans. on Power Systems*, pp. 3221-3229, vol. 31, no. 4, July 2016.
- [116] Costas D. Vournas, Charalambos Lambrou and Panagiotis Mandoulidis, “Voltage stability monitoring from a transmission bus PMU,” *IEEE Trans. on Power Systems*, pp. 3266-3274, vol. 32, no. 4, July 2017.
- [117] P. Zhang, L. Min and J. Chen, “Measurement-based voltage stability monitoring and control,” U.S. Patent 8.126 667, 2012.
- [118] K. Sun, P. Zhang and L. Min, “Measurement-based voltage stability monitoring and control for load centers,” EPRI Report No. 1017798, 2009.
- [119] Fengkai Hu et al, “Measurement based real-time voltage stability monitoring for load areas,” *IEEE Trans. on Power Systems*, pp. 2787-2798, vol. 31, no. 4, July 2016.
- [120] John William Simpson-Porco and Francesco Bullo, “Distributed monitoring of voltage collapse sensitivity indices,” *IEEE Trans. on Smart Grid*, pp. 1979-1988, vol. 7, no. 4, July 2016.

- [121] Mariana Kamel, Abdelrahman A. Karrar and Ahmed H. Eltom, “Development and application of a new voltage stability index for on-line monitoring and shedding,” *IEEE Trans. on Power Systems*, pp. 1231-1241, vol. 33, no. 2, March 2018.
- [122] Heng–Yi Su and Tzu-Yi Liu, “Enhanced-online-random-forecast model for static voltage stability assessment using wide area measurements,” *IEEE Trans. on Power Systems*, pp. 6696-6704, vol. 33, no. 6, November 2018.
- [123] E. Gonzales et. al., “PMU based voltage stability indices with intermediate load corrections,” *IEEE Latin America Trans.* pp. 1172-1179, vol. 16, no. 4, April 2018.
- [124] Samuel C. Chevalier and Paul D. H. Hines, “Mitigating the risk of voltage collapse using statistical measures from PMU data,” *IEEE Trans. on Power Systems*, pp. 120-128, vol. 34, no. 1, January 2019.
- [125] Byung Ha Lee and Kwang Y. Lee, “A Study on voltage collapse mechanism in electric power systems,” *IEEE Trans. on Power Systems*, vol. 6, no. 3, August 1991.
- [126] Mishra, P., Udupa, H. N., & Ghune, P., “Calculation of sensitive node for IEEE–14 bus system when subjected to various changes in load,” *In Proceedings of IRAJ International Conference*, 21st July 2013.
- [127] N. Yorino, E. E. El-Araby, H. Sasaki and S. Harada, “A new formulation for FACTS allocation for security enhancement against voltage collapse,” *IEEE Trans. on Power Systems*, vol. 18, no. 1, pp. 3-10, February 2003.

- [128] Park, Jong-Bae, Ki-Song Lee, Joong-Rin Shin, and Kwang Y. Lee. "A particle swarm optimization for economic dispatch with non-smooth cost functions," *IEEE Trans. on Power systems*, vol. 20, no. 1, pp. 34-42, February 2005.
- [129] Kannan, S., S. Mary Raja Slochanal, and Narayana Prasad Padhy, "Application and comparison of metaheuristic techniques to generation expansion planning problem," *IEEE Trans. on Power Systems*, vol. 20, no. 1, pp.466-475, February 2005.
- [130] Huang, Chao-Ming, Chi-Jen Huang, and Ming-Li Wang. "A particle swarm optimization to identifying the ARMAX model for short-term load forecasting," *IEEE Trans. on Power Systems*, vol. 20, no. 2 pp. 1126-1133, May 2005.
- [131] Bangjun Lei and Shumin Fei, "IN H_{∞} control for STATCOM to improve voltage stability of power system," *Electronics Letter*, vol. 53, no. 10, pp. 670-672, May 2017.
- [132] Yan Xu et al, "Multi-objective dynamic VAR planning against short-term voltage instability using a decomposition-based evolutionary algorithm," *IEEE Trans. on Power Systems*, vol. 29, no. 6, pp. 2813-2822, November 2014.
- [133] Kamel Sayahi, Ameni Kadri, Ridha Karwi and Faouzi Bacha, "Study and implementation of a static compensator (STATCOM) using direct power control strategy," *IEEE 9th International Renewable Energy Congress (IREC)*, 20-22 March 2018, Hammamet, Tunisia.

- [134] “*Power System Test Case Archive*,” Available:
[http://www.ee.washington.edu/research/pstca/pf14/pg_tca14bus.htm].
- [135] New England 39-Bus System; [Available: <http://icseg.iti.illinois.edu/ieee-39-bus-system/>].
- [136] North Region Power Grid (NRPG) 246-Bus System; 2013 [Available:
http://www.iitk.ac.in/eeold/facilities/Research_labs/Power_System/NRPG-DATA.pdf].