

**Dr. Bimal Chandra Deka** Designation: Professor Date of Joining: 12/11/1992

Qualification:

2004 Ph.D. IIT Bombay

Email: dekabimal@rediffmail.com Phone No.: +919859180023 Specialization: Power system reliability

## **Journals Papers:**

- 1. Reliability analysis of an active distribution network integrated with solar, wind and tidal energy sources, International Transactions on electrical energy systems, (2021), DOI: 10.1002/2050-7038.13201, (SCI expanded and SCOPUS indexed)
- An approach to reliability modeling and availability analysis of a solar electric vehicle withstand-by plug-in facility, International Transactions on electrical energy systems, (2021), DOI: 10.1002/2050-7038.13147, (SCI expanded and SCOPUS indexed)
- An Approach to reliability, availability and maintainability analysis of a plug-in electric vehicle, World Electric Vehicle Journal, 2021, 12, 34. https://doi.org/10.3390/wevj12010034 (SCOPUS indexed)
- 4. Reliability Modeling of Micro-grid System using Hybrid Methods in Hot Standby Mode, IEEE Systems Journal, Vol. 13, Issue 3, Sept 2019.
- Impact of isolation process of faulty section on reliability of distribution system connected with distributed generation, Int. Journal of Power and Energy Conversion, 2018, Vol. 9, No. 1, pp. 47-57.
- 6. ANN-based adaptive current controller for on-grid DG system to meet frequency deviation and transient load challenges with hardware implementation, IET Renewable Power Generation, vol.12,no.1, pp. 61-71, 2018
- 7. An adaptive current control-detuned harmonics elimination schemes for enhancement of power quality in RES interfaced AC-grid network, Elsevier- Sustainable Energy Technologies and Assessments, vol.25, pp. 11-23, 2018
- 8. Well-being analysis for generating system expansion planning, Int. Journal of Engineering Research and Technology, Vol. 3, Issue 9, September 2014.
- 9. Impact of location of distributed generation on reliability of distribution system, Int. Journal of Engineering Research and Development, Vol. 9, Issue 5, December 2013
- 10. Impact of distributed generation on reliability of distribution system, IOSR Journal of Electrical & Electronics Engineering, Vol. 8, Issue 1, Nov-Dec 2013.
- 11. Composite system reliability assessment using fuzzy linear programming, Electric PowerSystems

Research, USA, Vol. 73 (2005).

- 12. Impact of FACTS controller on reliability of composite power generation and transmissionsystems, Electric Power Systems Research, USA, Vol. 72 (2004).
- 13. Reliability evaluation of generation/transmission composite system incorporating FACTS, Int. Journal on Communications in Dependability and Quality Management, Cacak, Serbia, Vol. 6, No. 2, 2003.
- 14. The use of fuzzy numbers in reliability calculations, IETE Technical Review, Vol. 18, No.1, 2001.

## **International Conference papers:**

- 1. Reliability centered capacity reserve management in deregulated power market, IEEE Int. Conf. on Power Electronics, Smart Grid and Renewable Energy (IEEE PESGRE 22), January 2-5, 2022 (Published in IEEE Explore)
- Reliability analysis of electric vehicle integrated distribution network, 2<sup>nd</sup> IEEE IAS Int. Conf. on Computational Performance Evaluation (ComPE-2021), December 1-3, 2021 (Published in IEEE Explore)
- 3. Forced outage rate evaluation using possibility theory of reliability, Proc. Of 2<sup>nd</sup> International conference on Quality, Reliability and Information Technology, December 2003, New Delhi
- 4. An algorithm for selecting critical contingencies using reliability index in power systems, Proc. Of the Eight Int conf. on Quality, Reliability and Maintainability-CCF 2002, Sinaia, Romania, Sept 2002, pp.197-201.
- Generating capacity reliability calculation using fuzzy number and fuzzy confidence interval, Proc. Of the Eight Int. Middle-East Power Systems Conf. (MEPCON 2001), Helwan, Cairo, Dec 2001.
- 6. Availability analysis of a FACTS controller, Proc. Of the Int. conf. on Quality, Reliability and Control (ICQRC 2001), Mumbai, Dec 2001.
- 7. Evaluation of energy based reliability index for generating system using fuzzy sets, Proc. Of the Int. conf. on Quality, Reliability and Control (ICQRC 2001), Mumbai, Dec 2001.

## National Conference papers:

- 1. An approach to system health analysis for generation expansion planning, Nat. conf. on emerging trends in engineering and technology, Guwahati, March 2014.
- 2. Embedded generation: A new trend in power generation from distributed energy resources, National conf. on energy resources of North east India, Guwahati, Nov 2009.
- **3.** Including FACTS controller in composite power system reliability evaluation, Proc. Of the National Power System Conference (NPSC 2002), IIT Kharagpur, Dec 2002, pp. 676-679.

## **Book Chapters:**

- Reconfiguration of Radial Distribution Network Implementing TLBO Algorithm for Loss Minimization and Reliability improvement: Intelligent Techniques and Applications in Science and Technology. ICIMSAT 2019. Learning and Analytics in Intelligent Systems, Vol 12. Springer, Cham, 2020.
- 2. Reliability Analysis of Micro-grid Systems using Hybrid Approaches: Advances in RAM Engineering, Springer Series in Reliability Engineering, 2020.