REFERENCES

[1] P. S. Georgilakis and N.D. Hatziargyriou, "Optimal distributed generation placement in power distribution networks: models, methods and future research," *IEEE Transactions on Power Systems*, vol. 28, no. 3, pp. 3420 – 3428, Aug. 2013.

[2] "CEB long term generation expansion plan 2020- 2039" Draft, [online]https://www.pucsl.gov.lk/lcltgep-2020-2039/.

[3] "Present Status of NCRE as at 31st May 2020", [online] https://ceb.lk/business-with ceb/national-energy/en.

[4] P. Prakash and D.K. Khatod, "Optimal sizing and siting technologies for distributed generation in distribution system: A review," *Renewable and Sustainable Energy Reviews 57, Elsevier,* pp. 111-130, 2016.

[5] S. Daud, A. F. A. Kadir, M. Y. Lada, and C. K. Gan, "A Review : Optimal Distributed Generation Planning and Power Quality Issues*", International Review of Electrical Engineering (I.R.E.E.), Vol. 11, N. 2 ISSN 1827- 6660*, 2016.

[6] V.Roja and M.S. Sujitha, "A Review of optimal DG allocation in distribution system for loss minimization", *IOSR Journal of Electrical and Electronics Enginering,* pp. 15-22, 2016

[7] F.A.H. Ramirez, E.R.Trujillo and J.A.H. Mora, "Implementation of an optimal power flow to reduce losses and improve the profiles voltages in electrical microgrids with distributed generation," *IEEE Thirty fifth general American and Panama convention (CONCAPAN XXXV),* 2015.

[8] M. Bouzguenda, A. Samadi and S.R. Mohamed, "Optimal placement of distributed generation in electrical distribution networks," *IEEE international Conference on intelligent technologies in control, optimization and signal processing*, 2017.

[9] A.S. Hassan, Y. sun and Z. Wang, "Optimization techniques applied for optimal planning and integration of renewable energy sources based on distributed generation: Recent trends," *Cogent Engineering, 7:1, 1766394, DOI:10.1080/23311916.2020.1766394*, 2020.

[10] S.M. Dawold, L. Xiangning, F.M.F. Flaih and M.I. Okba, "PSO algorithm for optimal placement of multiple SPV based distributed generators in Microgrid," *IEEE Power and Energy Engineering Conference (APPEEC), IEEE PES Asia-Pacific, pp. 125-129*, 2016.

[11] A. Olaniyan, B. Jimoh and Y. Jibril "Application of Analytical- Firefly Algorithm for optimal location and sizing of distributed generator in standard IEEE 30- bus distribution network," *International Engineering Conference (IEC), Federal University of Technology, Minna, ResearchGate publication*, 2015.

[12] M. Kashyap, A. Mittal and S. Kansal, "Optimal placement of distributed generation using Genetic Algorithm Approach," https://www.researchgate.net/publication/326721495 , 2019.

[13] B.M. Weedy, B.J. Cory, N. Jenkins, J.B. Ekanayake, G. Strbac, "Electric power systems - Fifth Edition", *A John Wiley & Sons ,Ltd . Publication* ,2012.

[14] S.R. Singiresu, "Engineering optimization theory and practice- Fourth Edition", *A John Wiley & Sons ,Ltd . Publication* ,2009.

[15] L.Y. Wong, S.R.A. Rahim, M.H. Sulaiman and O. Aliman, "Distributed generation installation using particle swarm optimization," *IEEE 4th International Power Engineering and Optimization Conf. (PEOCO2010), pp. 159-163*, 2010.

[16] A. Ramamoorthy and R. Ramachandran, "Optimal Siting and sizing of multiple DG units for the enhancement of voltage profile and loss minimization in transmission systems using nature inspired algorithm," *Hindawi Publishing Corporation, The scientific world jourinal- volume 2016*, 2016.

[17] H.D. Mojarrd, G.B. Gharehpetian, H. Rastegar and J. Olamaei, "Optimal placement and sizing of distributed generation units in distribution networks by novel hybrid evolutionary algorithm," *Energy procedia*; *Elsveier*, *Energy xxx(2013), p.p. 1-10*, 2013.

[18] A. A. A. EI-Ela, R. A. EI-Sehiemy, A.M. Kinawy and E. S. Ali, "Optimal placement and sizing of distributed generation units using different cat swarm optimization algorithms," *Eighteenth International Middle-East Power Systems Conference (MEPCON)At: Helwan University, Cairo- IEEE conference paper*, 2016.

[19] D.B. Prakash, C. Lakshminarayana “Multiple DG placements in distribution system for power loss reduction using PSO algorithm” *Global Colloquium in Recent Advancement and Effectual Researches in Engineering, Science and Technology,* 2016.

[20] D.Q. Hung and M. Nadarajah “Determining PV penetration for distribution system with time- varying load models,” *IEEE transaction on power systems*, 2014.

[21] M. Narayana and S. Witharana “Adaptive prediction of power fluctuations from a wind turbine at Kalpitiya area in Sri Lanka,” *IEEE ICIAfS'12 research conference*, 2012.

[22] S.A.S. Mustaffa, I Musirin and N.H. Rosli, “Multi DGPV installation in transmission system for loss minimization,” *IEEE international conference on industrial engineering and applications*, 2017.

[23] S. Kumar, D. Pal, K.K. Mandal and N. Chakraborty, “Performance Study of a New Modified Differential Evolution Technique Applied for Optimal Placement and Sizing of Distributed Generation,” SEMCCO Conference pp. 189–198 Volume: Part I, LNCS 8297, 2013.