DAFTAR PUSTAKA

[1] A.Amin, S.Kamel & M.Ebeed, "Optimal Reactive Power Dispatch Considering Sssc Using Grey Wolf Algorithm", Eighteenth International Middle East Power Systems Conference (MEPCON). 2016.

[2] B.Zhao, C.X.Guo, and Y.J.Cao, "A Multiagent-Based Particle Swarm Optimization Approach For Optimal Reactive Power Dispatch" , IEEE Transactions On Power Systems, Vol. 20, No. 2, May 2005.

[3] A.Khorsandi, A.Alimardani, B.Vahidi & S.H. Hosseinian, "Hybrid Shuffled Frog Leaping Algorithm And Nelder–Mead Simplex Search For Optimal Reactive Power Dispatch" IET Gener. Transm. Distrib, 2011, Vol. 5, Iss. 2, pp. 249–256.

[4] S.M.Sadeghzadeh, A.H.Khazali, S.Zare, "Optimal Reactive Power Dispatch Considering Tcpar And Upfc", IEEE EUROCON 2009.

[5] D.Kaur, T.T.Lie, N.K.C.Nair & B.Valles, "An Optimal Reactive Power Dispatch (ORPD) For Voltage Security Using Particle Swarm Optimization (PSO) In Graph Theory" , 2016 IEEE International Conference on Sustainable Energy Technologies (ICSET).

[6] F.P.Sakti & J.T.Putra,"Optimal Reactive Power Dispatch Untuk Meminimalkan Rugi Daya Menggunakan Flower Pollination Algorithm", 2019 Jurnal Teknik Elektro Vol. 11 No. 2.

[7] G.F.Fahnani, Yuningtyastuti dan S.Handoko, "Simulasi Optimasi Daya Reaktif Dan Tegangan Pada Sistem Jamali 500 kV Menggunakan Metode Particle Swarm Optimization", 2013 Transient, VOL.2, NO. 2.

[8] D.Despa, "Pengaturan Aliran Daya Reaktif Dengan Transformator Regulasi Jenis Pengatur Tegangan Pada Jaringan Sistem Tenaga Listrik", Ejurnal Rekayasa dan TE 2009.

[9] Y.Jiang, T.Hu, C.Huang & X.Wu, "An Improved Particle Swarm Optimization Algorithm" , 2007 Applied Mathematics And Computation 193 231–239.

[10] H.Muhamad,"Optimasi Support Vector Regression (SVR) Menggunakan Algoritma Improved-Particle Swarm Optimization (IPSO) Untuk Peramalan Curah Hujan", 2017.

[11] P.J.Angeline, "Using Selection To Improve Particle Swarm Optimization, Proceedings Of The IEEE Congress On Evolutionary Computation" , Anchorage, Alaska, USA (1998) 84–89.

[12] M.Løvbjerg, T.KRasmussen, T.Krink, Hybrid Particle Swarm Optimiser With Breeding And Subpopulations, In: Proceedings Of The Genetic And Evolutionary Computation Conference, 2001

[13] K.E.Parsopoulos, V.P.Plagianakos, G.D.Magoulas, M.N.Vrahatis, Improving Particle Swarm Optimizer By Function Stretching, Advances In Convex Analysis And Global Optimization (2001) 445–457.

[14] K.E.Parsopoulos, V.P.Plagianakos, G.D.Magoulas, M.N.Vrahatis, Stretching Technique For Obtaining Global Minimizers Through Particle Swarm Optimization, In: Proceedings Of The Workshop On Particle Swarm Optimization, Indianapolis, IN.

[15] K.E.Parsopoulos, M.N.Vrahatis, Initializing The Particle Swarm Optimizer Using The Nonlinear Simplex Method, Advances In Intelligent Systems, Fuzzy Systems, Evolutionary Computation, WSEAS Press, 2002, pp. 216–221.

[16] N.Higashi, H.Iba, Particle Swarm Optimization With Gaussian Mutation, Proceedings Of The IEEE Swarm Intelligence Symposium 2003, Indianapolis, Indiana, USA (2003) 72–79.

[17] X.Shi, Y.Lu, C.Zhou, H.Lee, W.Lin, Y.Liang, Hybrid Evolutionary Algorithms Based On PSO And GA, Proceedings Of IEEE Congress On Evolutionary Computation 2003, Canbella, Australia (2003) 2393–2399.

[18] X.H.Wang, J.J.Li, Hybrid Particle Swarm Optimization With Simulated Annealing, Proceedings of The Third International Conference On Machine Learning And Cybernetics, Shanghai (2004) 2402–2405.

[19] J.Gou, Y.X.Lei, W.P.Guo, C.Wang, Yi-Q.Cai, W.Luo, " A Novel Improved Particle Swarm Optimization Algorithm Based On Individual Difference Evolution", 2017 Applied Soft Computing.

[20] W.Setiawan, N.P.S.Utama,” Optimasi Reaktif Power Dispatch Menggunakan Real-Coded Genetic Algorithm (RGA)”, Teknologi Elektro Vol. 10 No.1, 2011.

[21] HOCQUE, D. 2005. *Introduction to Matlab for Engineering Student Ver* 1.2

[22] M.Sarstedt, S.Garske, L.Hofmann, "Application of PSO-Methods for the Solution of the Economic Optimal Reactive Power Dispatch Problem ", 2018 IEEE.

[23] M.H.Sulaiman & Z.Mustaffa, "Cuckoo Search Algorithm As An Optimizer For Optimal Reactive Power Dispatch Problems", Universiti Malaysia Pahang. 2017 International Conference on Control, Automation and Robotics.

[24] M.S.Alam & M.S.Alam, "Optimal Reactive Power Dispatch Using Hybrid Loop-Genetic Based Algorithm", 2016 IEEE.

[25] Data System IEEE 30-Bus dan IEEE 14-Bus http://www.ee.washington.edu /research/ pstca.

[26] K.S.Pandya, "Optimal Reactive Power Dispatch (ORPD) Using Particle Swarm Optimization (PSO)" 2017.

[27] R.A.Krisida, A.Soeprijanto, H.Suryoatmojo,"Optimisasi Pengaturan Daya Reaktif Dan Tegangan Pada Sistem Interkoneksi Jawa-Bali 500 kV Menggunakan Quantum Behaved Particle Swarm Optimization",FTI-ITS 2011.

[28] T.Das & R.Roy,"Optimal Reactive Power Dispatch Using Jaya Algorithm", 2018 EDCT.

[29] M.Sarstedt, S.Garske, L.Hofmann,"Application Of PSO-Methods For The Solution of the Economic Optimal Reactive Power Dispatch Problem", 2018 IEEE Electronic Power Grid (eGrid).

[30] P.A.Digehsara, S.N.Chegini, Ahmad Bagheri & Masoumeh Pourabd Roknsaraei,"An Improved Particle Swarm Optimization Based on the Reinforcement of the Population Initialization Phase By Scrambled Halton Sequence" 2020 Cogent Engineering.

[31] H.Singh & L.Srivastava,"Multi-Objective Optimal Reactive Power Dispatch for Distribution System",2017 CPCSI IEEE International Conference on Power, Control, Signals and Instrumentation Engineering.

[32] S.Mouassa & T.Bouktir, "Artificial Bee Colony Algorithm For Discrete Optimal Reactive Power Dispatch ", 2015 IESM Conference, Spain.

LAMPIRAN

Berdasarkan Keputusan Menteri Energi dan Sumber Daya Mineral RI No: 55 k/20/MEM/2019 tentang besaran Biaya Pokok Penyediaan Pembangkitan PT. PLN (PERSERO), BPP untuk daerah Jawa-Bali 985 Rp/kWh. Dalam simulasi untuk sistem Jawa-Bali 500 kV

Tabel: Perbandingan Reduksi Rugi Daya Dalam Rp/kWh untuk sistem Jawa-Bali 500 kV

No		**Rugi Daya (MW)**	**Reduksi Rugi Daya**	**Reduksi Rugi Daya (kWh)**	**Reduksi Rugi Daya dalam Rp/kWh**
1	**Sebelum Optimasi**	380,289			
2	**PSO**	375,045	1,40% (5,224 MW)	5224	5.145.640,00
3	**IDE-PSO**	**351,692**	8,13% (28,594 MW)	**28594**	**28.165.090,00**