Article Abstract

Title:	**Application of computational intelligence in emerging power systems**
Author(s):	D. Saxena[*], S.N. Singh[+1] and K.S. Verma[#]
Address(es):	[*] Department of Electrical and Electronics Engineering, Invertis Inst. of Engg.& Tech., Bareilly (UP), INDIA. [+] Department of Electrical Engineering, CET, Denmark Technical University, Kgs. Lyngby, DENMARK. [#] Department of Electrical Engineering, K.N.I.T Sultanpur (UP), INDIA. E-mails: diptisx@gmail.com (D. Saxena), snsingh@iitk.ac.in (S.N. Singh [1], [1]Corresponding author), ksv02@rediffmail.com (K.S. Verma)
Journal:	*International Journal of Engineering, Science and Technology*, Vol. 2, No. 3, 2010, pp. 1-7.
Abstract:	Electric power systems, around the world, are changing in terms of structure, operation, management and ownership due to technical, financial and ideological reasons. Power system keeps on expanding in terms of geographical areas, assets additions, and penetration of new technologies in generation, transmission and distribution. This makes the electric power system complex, heavily stressed and thereby vulnerable to cascade outages. The conventional methods in solving the power system design, planning, operation and control problems have been very extensively used for different applications but these methods suffer from several difficulties due to necessities of derivative existence, providing suboptimal solutions, etc. Computation intelligent (CI) methods can give better solution in several conditions and are being widely applied in the electrical engineering applications. This paper highlights the application of computational intelligence methods in power system problems. Various types of CI methods, which are widely used in power system, are also discussed in the brief.
Keywords:	Power systems, computational intelligence, artificial intelligence.