



6929 Sunrise Blvd, Suite #101  
 Citrus Heights, CA 95610  
 (916) 722-1484  
 www.plexossolutions.com

**Tao Guo, Ph.D.**  
**Vice President, Technical Services**

<b>Summary</b>	<p>Dr. Guo has strong theoretical and technical background and has more than 25 years working experience in power system planning, operation and control in electric energy industry.</p>
	<p>Expertise includes:</p> <ul style="list-style-type: none"> <li>• Unit Commitment and Economic Dispatch using Dynamic Programming, Lagrange Relaxation, and Mixed Integer Programming.</li> <li>• Optimal Power Flow and its co-ordination with Unit Commitment.</li> <li>• Multiple commodity co-optimization in deregulated energy markets.</li> <li>• Hydrothermal coordination.</li> <li>• Short-term and long-term load forecasting.</li> <li>• Energy market stochastic simulation and nodal Market Clearing Price (MCP) and Locational Market Price (LMP) forecasts.</li> <li>• Long-term energy resource and limit allocation.</li> <li>• Generation asset / contract valuation and profit maximization.</li> <li>• Portfolio and Risk Management.</li> <li>• Resource Planning and Capacity Expansion in the traditional utility environment and in deregulated energy markets.</li> </ul>
<b>Employment History</b>	
<b>2006 - Present</b>	<p><b><i>Vice President of Technical Services, PLEXOS Solutions LLC</i></b></p> <p>Responsible for all technical services in N. America including software implementation, training, user support, and consulting.</p>
<b>1993 - 2006</b>	<p><b><i>Director of Engineering (Power System Simulation and Optimization), Henwood Energy Services, Inc., a company of Global Energy Decision (GED), Sacramento, California.</i></b></p> <p>Led R&amp;D team on power system simulation and optimization software product design, development, maintenance, documentation, client training and support. Participated and supported product marketing, client management and modeling consultation.</p>

**Tao Guo, Ph.D.**  
**Vice President, Technical Services**

---

**1989 - 1993** **Senior Analyst, Energy Management Associates, the Utilities Division of Electronic Data System Corporation (EDS), Atlanta, Georgia.**

Responsible for algorithm development and maintenance for power system production costing software product.

**1982 - 1983** **Researcher, the Department of Electrical Power Engineering, Huazhong University of Science and Technology, Wuhan, China.**

Developed optimal power flow software for the control center of the Gezhouba Hydro Power Plant.

**Education** Ph.D. in Power System Planning, Operation and Control  
August, 1989  
University of Michigan, Ann Arbor, Michigan.

Dissertation: *Application of Hamiltonian Dynamics to Power System Stability Determination.*

M.Eng. in Power System Planning, Operation and Control  
April, 1982  
Huazhong University of Science and Technology, Wuhan, China.

Thesis: *Computer Application to Power Generator Voltage Regulator Digital Control.*

**Publications and Presentation** N. Narasimhamurthi, Tao Guo, *Transient Stability Determination Using Differential Inclusion*, Proceedings of 24<sup>th</sup> Conference on Decision and Control, IEEE, Ft. Lauderdale, Florida, December 11-13, 1985, PP 77-80.

Tao Guo, N. Narasimhamurthi, N. Harris McClamroch, *Application of Hamiltonian System Theory to Three Machine Power System Transient Analysis*, Proceedings of 26<sup>th</sup> Allerton Conference on Communication, Control and Computer, Allerton House, Illinois, September 28-30, 1989.

Tao Guo, Mark I. Henwood, Marieke van Ooijen, *An Algorithm for the Combined Heat and Power Economic Dispatch*, 96 WM 192-5 PWRs, 1996 IEEE/PES WM, January 21-25, 1996 Baltimore, Maryland.

---