

PUBLICATIONS/PRESENTATIONS

L. Hajagos, D. Fischer, V. Stanistic, *Technical Review for the Setting and Verification of Power System Stabilizers as Part of Generator Excitation Control Systems*, CEATI REPORT No. T183700 3930, 2020.

Use of the new revisions of IEEE Standards 421.2 and 421.5 to satisfy international grid code requirements, presented at the IEEE PES Excitation System Subcommittee Panel Session, July 2016, Boston, MA, (Les Hajagos Chair and co-author).

Les Hajagos, Robert Thornton-Jones, Ruediger Kutzner, Uwe Seeger, *The Impact of Grid Codes Upon Generator Excitation System Design and*, presented at the IEEE PES Electric Machinery Committee Panel Session, July 2016, Boston, MA.

TF on Test Systems for Voltage Stability and Security Assessment (L. T. G. Lima – contributor), “*Test Systems for Voltage Stability Analysis and Security Assessment*”, IEEE Power and Energy Society Technical Report PES-TR19, August 2015.

<http://resourcecenter.ieee-pes.org/pes/product/technical-publications/PESTR19>

TF on Benchmark Systems for Stability Controls (L. T. G. Lima – contributor), “*Benchmark Systems for Small-Signal Stability Analysis and Control*”, IEEE Power and Energy Society Technical Report PES-TR18, August 2015.

<http://resourcecenter.ieee-pes.org/pes/product/technical-publications/PESTR18>

TF on Turbine-Governor Modeling (L. T. G. Lima and L. Hajagos – contributors), “*Dynamic Models for Turbine-Governors in Power System Studies*”, IEEE Power and Energy Society Technical Report PES-TR1, January 2013.

<http://resourcecenter.ieee-pes.org/pes/product/technical-publications/PESTR1>

M.R. Fogarty, L.M. Hajagos, G.R. Bérubé. *Elements of a Successful Validation Test: A Practical Approach to NERC Generator Compliance*, presented at the IEEE PES Power System Dynamic Performance Committee panel session on Generator Testing and Model Validation, July 2009, Calgary, AB.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5275339&isnumber=5260217>

G.R. Bérubé, L.M. Hajagos, *Coordination of Under Excitation Limiters and Loss of Excitation Relays with Generator Capability*, presented at the IEEE PES Excitation System Performance and Modeling Working Group Panel Session, July 2009, Calgary, AB.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5275365&isnumber=5260217>

G.R. Bérubé, L.M. Hajagos, M.R. Fogarty. *Generator Control Testing to Certify Reactive Power Capability, Excitation System Functions and Frequency Response; Guidelines for NERC Compliance*, EPRI report 1014911, November 2007.

Interconnected Power System Response to Generation Governing: Present Practice and Outstanding Concerns, IEEE Task Force Report Special Publication 07TP180, May 2007.

Guidelines for Generator Stability Model Validation Testing, IEEE Task Force on Generator Model Validation Testing of the Power System Stability Subcommittee, L.M. Hajagos, Chair. Presented IEEE at PES Meeting, June 2007, Tampa, FL.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4275900&isnumber=4275199>

G.R. Bérubé, L.M. Hajagos, *IEEE Tutorial Course: Power System Stabilization Via Excitation Control*, IEEE ref. 09TP250, IEEE Power and Energy Society, Piscataway, NJ. Presented at IEEE PES Meeting, June 2007, Tampa, FLA and July 2011, Detroit MI.

L. M. Hajagos and M. J. Basler, "Changes to IEEE 421.5 recommended practice for excitation system models for power system stability studies," *IEEE Power Engineering Society General Meeting, 2005, 2005*, pp. 334-336.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1489146&isnumber=32012>

IEEE 421.5-2005 and revision 2016 Recommended Practice for Excitation System Models for Power System Stability Studies, April 2006/August 2016, L.M. Hajagos, Chair, L. Lima contributor/editor.

IEEE 421.1 Definitions for Excitation Systems for Synchronous Machines, L. Hajagos, L. Lima contributor/editor.

IEEE 421.2 Guide for Identification, Testing, and Evaluation of the Dynamic Performance of Excitation Control Systems, L.M. Hajagos WG chair; contributor/editor.

IEEE 421.4 Guide for the Preparation of Excitation System Specifications, L. Hajagos, L. Lima contributor/editor.

NERC Standards MOD-025, -026, -027, PRC-019, -024, L. Hajagos contributor/editor.

J. W. Feltes, L. T. G. Lima and J. Senthil, "IEEE 421.5 standard - perspective of a user and supplier of simulation software," *IEEE Power Engineering Society General Meeting, 2005, 2005*, pp. 995-998 Vol. 1.

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1489696&isnumber=32012>

L.M. Hajagos, *CIGRE Technical Brochure 238, Modeling of Gas Turbines and Steam Turbines in Combined-Cycle Power Plants*, December 2003.

L. Hajagos, "An update on power system stabilization via excitation control," *Power Engineering Society General Meeting, 2003, IEEE, 2003*, pp. 1757 Vol. 3.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1267422&isnumber=28353>

Kundur, P.; Berube, G.R.; Hajagos, L.M.; Beaulieu, R. *Practical Utility Experience with and Effective Use of Power System Stabilizers*, IEEE PES Meeting July 2003, Vol 3, pp 1777- 1785.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1267426&isnumber=28353>

G.R. Bérubé, L.M. Hajagos, *Utility Experience with Gas Turbine Testing and Modeling*, prepared for presentation at the IEEE PES Working Group Panel Presentation on Power Plant Modeling, January 2001.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=916934&isnumber=19809>

G.R. Bérubé, L.M. Hajagos, R.E. Beaulieu, *Practical Utility Experience with Application of Power System Stabilizers*, presented at the IEEE PES Working Group Panel Presentation on Power System Stabilizers, July, 1999.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=784331&isnumber=17001>

G.R. Bérubé, L.M. Hajagos, *Modelling Based on Field Tests of Turbine/Governor Systems*, presented at the IEEE Symposium on Frequency Control Requirements, Trends and Challenges in the New Utility Environment, February, 1999.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=747517&isnumber=16105>

L.M. Hajagos, B. Danai, *Laboratory Measurements and Models of Modern Loads and Their Effect on Voltage Stability Studies*, IEEE Transactions on Power Systems, Vol 13, No 2, May 1998.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=667386&isnumber=14619>

G.R. Bérubé, L.M. Hajagos, *Testing and Modelling of Generator Controls on the Ontario Hydro System*, presented at the WSCC Workshop on Synchronous Unit Dynamic Testing and Computer Model Validation (January 30, 1997) and the NERC System Dynamics Data Working Group Symposium (April 30, 1997)

G.R. Bérubé, L.M. Hajagos, *Utility Experience with Digital Excitation Systems*, IEEE PES Winter Meeting 1997, New York, NY, PE 581-PWRS-003-1997.

L. M. Hajagos and G. R. Berube, "Utility experience with digital excitation systems," in IEEE Transactions on Power Systems, vol. 13, no. 1, pp. 165-170, Feb 1998.
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=651629&isnumber=14211>

G.R. Bérubé, L.M. Hajagos, R.E. Beaulieu, *A Utility Perspective on Underexcitation Limiters*, IEEE Transactions on Energy Conversion, Vol 10, No 3, September 1995.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=464878&isnumber=9745>

G.J. Rogers, R.E. Beaulieu, L.M. Hajagos *Performance of Station Service Induction Motors Following Full Load Rejection of a Nuclear Generating Unit*, IEEE Transactions on Power Systems, Vol 10, No 3, August 1995. <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=466522&isnumber=9784>

K.S. Shah, G.R. Bérubé, R.E. Beaulieu, *Testing and Modelling of the Union Electric Generator Excitation Systems*, presented at the 1995 Missouri Valley Electrical Association meeting in Kansas City, MO, April, 1995.

G.R. Bérubé, L.M. Hajagos, R.E. Beaulieu, *A Utility Perspective on Underexcitation Limiters*, IEEE PES Excitation System Subcommittee Panel Presentation, June 1994.

J.R.R. Service, L.M. Hajagos, *Practical Aspects of On-Load Generator Testing*, EPRI TR-102351, Project 2328-02, Final Report, May 1993.

G.R. Bérubé, T.A. Gough, *Power System Disturbance Recorder*, Canadian Electrical Association, Transmission, Station Planning and Operations Subsection, March 1989.

G.R. Bérubé, B.T. Ooi, *Fast Periodic Solution for Twelve-Pulse Converters*, IEEE Trans. on Power Apparatus and Systems, Vol. PAS-102, No.7, July 1983, pp 1994-2003.

G. R. Berube and L. M. Hajagos, "Testing & modeling of generator controls," Power Engineering Society General Meeting, 2003, IEEE, 2003, pp. 1322 Vol. 3.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1267339&isnumber=28353>

L. T. G. Lima, A. Semlyen and M. R. Iravani, *"Harmonic domain periodic steady state modeling of power electronics apparatus: SVC and TCSC,"* in IEEE Transactions on Power Delivery, vol. 18, no. 3, pp. 960-967, July 2003.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1208384&isnumber=27186>

S. L. Varricchio, N. Martins and L. T. G. Lima, *"A Newton-Raphson method based on eigenvalue sensitivities to improve harmonic voltage performance,"* in IEEE Transactions on Power Delivery, vol. 18, no. 1, pp. 334-342, Jan 2003.

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1159940&isnumber=26005>

J. W. Feltes and L. T. G. Lima, "*Validation of dynamic model parameters for stability analysis; industry need, current practices and future trends*," Power Engineering Society General Meeting, 2003, IEEE, 2003, pp. 1301 Vol. 3.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1267336&isnumber=28353>

R. J. Koessler, J. D. Mountford, L. T. G. Lima and J. Rosende, "*The Brazilian interconnected system: a study on transfer limits, reactive compensation and voltage collapse*," Power Engineering Society Winter Meeting, 2001. IEEE, Columbus, OH, 2001, pp. 1147-1153 vol.3.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=917235&isnumber=19810>

N. Martins, L. T. G. Lima and H. J. C. P. Pinto, "*Computing dominant poles of power system transfer functions*," in IEEE Transactions on Power Systems, vol. 11, no. 1, pp. 162-170, Feb 1996.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=486093&isnumber=10381>

L. T. G. Lima, L. H. Bezerra, C. Tomei and N. Martins, "*New methods for fast small-signal stability assessment of large scale power systems*," in IEEE Transactions on Power Systems, vol. 10, no. 4, pp. 1979-1985, Nov. 1995.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=476066&isnumber=10147>

J. M. Campagnolo, N. Martins, J. L. R. Pereira, L. T. G. Lima, H. J. C. P. Pinto and D. M. Falcao, "*Fast small-signal stability assessment using parallel processing*," in IEEE Transactions on Power Systems, vol. 9, no. 2, pp. 949-956, May 1994.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=317651&isnumber=7654>

N. Martins, N. J. P. Macedo, L. T. G. Lima and H. J. C. P. Pinto, "*Control strategies for multiple static VAR compensators in long distance voltage supported transmission systems*," in IEEE Transactions on Power Systems, vol. 8, no. 3, pp. 1107-1117, Aug 1993.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=260887&isnumber=6593>

L. T. G. Lima, N. Martins and H. J. C. P. Pinto, "*Mixed real/complex factorization [power systems]*," in IEEE Transactions on Power Systems, vol. 8, no. 1, pp. 302-308, Feb 1993.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=221227&isnumber=5783>

N. Martins, H. J. C. P. Pinto and L. T. G. Lima, "*Efficient methods for finding transfer function zeros of power systems*," in IEEE Transactions on Power Systems, vol. 7, no. 3, pp. 1350-1361, Aug 1992.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=207354&isnumber=5304>

N. Martins and L. T. G. Lima, "*Determination of suitable locations for power system stabilizers and static VAR compensators for damping electromechanical oscillations in large scale power systems*," in IEEE Transactions on Power Systems, vol. 5, no. 4, pp. 1455-1469, Nov 1990.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=99400&isnumber=3139>

<http://www.kestrelpower.com/Articles.php>