

## CURRICULUM VITAE OF LARS NORDSTRÖM

### Personal Data

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*Name* Lars Martin Nordström  
*Born* Umeå, Sweden, 26 August 1969  
*Present Position* Head of Department – Electric Power and Energy Systems  
 Professor in Information Systems for Power System Control

### Research Field

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Power System Operation and Control focusing on issues at the crossroads of control, communication and power systems. His research interests include future architectures, functionality and quality aspects of Information and communication systems used for power system control, operation, automation and protection.

### Academic Appointments, most recent

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Member of KTH Promotions board, KTH, 2015 ->  
 Visiting professor, EECS Washington State University, Pullman, WA, USA., May – June 2014.  
 Visiting researcher, TRUST centre, UC Berkeley, CA, USA. June-July 2014.  
 Program Manager, Masters Program in Electric Power Engineering, KTH, 2014 -2016  
 Member of KTH Faculty council, April 2013 ->

### Industry and Innovation Engagements, most recent

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*Expektra*, Minority shareholder and member of the board at Expektra AB, offering software solutions for aggregation of flexible loads in electricity markets, 2012 ->  
*Boo Energi*, Member of the board at Boo Energi, utility serving 13500 electricity customers, 2010 ->  
*LB Software*, Founder and CEO of LB Software, a software house developing location based services. Led the expansion of the company through to a successful exit in 2005.

### Other Professional Appointments, most recent

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National lead of IEA-DSM Task 17 on Integration of Demand Side Management, Distributed Generation, Renewable Energy Sources and Energy Storages, 2014->  
 Member of the strategic advisory board for KTH Energy platform 2014->  
 Chairman of Swedish national electrotechnical commission working group on Smart cities, 2013 ->  
 Member of reference group on R&D for the Swedish council on Smartgrids, 2012-2014  
 Technical Project manager DISCERN FP7 project, 2013-2016  
 Faculty liaison of KTH-ABB strategic collaboration program, 2012->  
 Member of national Committee for ISGAN – International Smart grids Action Network, 2010->  
 Member of Swedish National Committee for CIRED 2009 ->  
 National representative for Cigre D2 – Information Systems and Telecommunications, 2008->  
 Chairman of Swedish mirror Committee of IEC TC57 Power System Management with related Information Exchange, 2006->

### Review assignments at universities and funding agencies, most recent

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Member of the Advisory committee for Professor/Chair in Electrical Energy Systems at TU/Eindhoven, 2016.  
 Expert reviewer for Professor in Smart Grids at Tampere University of Technology, Finland, 2016  
 Expert reviewer for Professorship in Smart grids at Alpen Adria University Klagenfurt, Austria, 2015.  
 Expert reviewer for Professor position at University of Vaasa Finland, 2012.  
 Expert reviewer for Professor position at Högskolan i Väst, Sweden, 2012.  
 Expert reviewer for Swiss National Science foundation, 2015  
 Panel member and expert reviewer NSF – National Science Foundation, Washington, USA, June 2014.

### Journal Editorial and Reviewing Services

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Editor and member of the Editorial board of Elsevier Journal on Electric Power Systems Research.  
 Associate Editor of IET Generation, Transmission & Distribution.

### Conference Engagements, most recent

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Symposium Co-chair IEEE SmartgridComm symposium on Communications and Networks to enable the Smartgrid, Dresden, 2017.

Technical Program Committee PSCC, Power Systems Computation Conference, 2013->  
 Co-Chair Technical Program Committee IEEE SmartgridComm, Venice, 2014  
 International Scientific Committee IEEE EnergyCon 2016, KU Leuven, 2016.  
 Technical Program Committee 20th IEEE International Conference on Emerging Technologies and  
 Factory Automation, Track 9 ICT for Energy systems, 2015  
 Technical Program Committee IATEM - Third International Workshop on Intelligent Agent  
 Technology, Power Systems and Energy Markets, Munich, September 2014.  
 Technical Program Committee DSN - Workshop on Trustworthiness of the Smartgrid ToSG, June  
 2014, Atlanta Georgia, USA.  
 Special rapporteur, Cigre D2 symposium, Paris, 2014

#### **Invited Speaker & Guest lectures, most recent**

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Keynote presentation at Swedish Energy Agency & IEA DSM Day, March 2016  
 Keynote presentation EPCC 13th Electric Power Control Centres workshop, Bled Slovenia, May 2015.  
 Invited presentation at DTU - Risö on End-user flexibility modeling, September 2015.  
 Lecture at CLUSTER-SEEP spring PhD school on Energy systems Transition, Zhejian University,  
 Hangzhou China, March 2015.  
 Invited speaker 2nd workshop on Trustworthiness of the Smartgrid, Washington DC, 2015.

#### **Journal publications, most recent**

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- [J-1] D. Babazadeh, D. Van Hertem, and L. Nordström, "Study of centralized and distributed coordination of power injection in multi-TSO HVDC grid with large off-shore wind integration," *Electric Power Systems Research*, vol. 136, pp. 281-288, Jul 2016.
- [J-2] Y. Wu and L. Nordström, "Adaptive data link configuration for WAMC applications using a Stateful Data Delivery Service platform," *Sustainable Energy Grids & Networks*, vol. 6, pp. 166-175, Jun 2016.
- [J-3] C. Sandels, D. Brodén, J. Widen, L. Nordström, and E. Andersson, "Modeling office building consumer load with a combined physical and behavioral approach: Simulation and validation," *Applied Energy*, vol. 162, pp. 472-485, Jan 2016.
- [J-4] C. Sandels, J. Widén, L. Nordström, and E. Andersson, "Day-ahead predictions of electricity consumption in a Swedish office building from weather, occupancy, and temporal data," *Energy and Buildings*, vol. 108, pp. 279-290, Dec 2015.
- [J-5] J. Hu, A. Saleem, S. You, L. Nordstrom, M. Lind, and J. Ostergaard, "A multi-agent system for distribution grid congestion management with electric vehicles," *Engineering Applications of Artificial Intelligence*, vol. 38, pp. 45-58, Feb 2015.
- [J-6] M. Eriksson, M. Armendariz, O. O. Vasilenko, A. Saleem, and L. Nordström, "Multiagent-Based Distribution Automation Solution for Self-Healing Grids," *IEEE Transaction of Industrial Electronics*, vol. 62, pp. 2620-2628, 2015.
- [J-7] K. Zhu, S. Rahimi, L. Nordström, and B. Zhang, "Design phasor data concentrator as adaptive delay buffer for wide-area damping control," *Electric Power Systems Research*, vol. 127, pp. 22-31, Oct 2015.
- [J-8] C. Sandels, J. Widén, and L. Nordström, "Forecasting household consumer electricity load profiles with a combined physical and behavioral approach," *Applied Energy*, vol. 131, pp. 267-278, Oct 2014.
- [J-9] L. Nordström, K. Zhu, and Y. Wu, "A Multi-Disciplinary Course Portfolio on Computer Applications in Power Systems," *IEEE Transactions on Power Systems*, vol. 29, pp. 1919-1927, Jul 2014.
- [J-10] M. Chenine, J. Ullberg, L. Nordström, Y. Wu, and G. N. Ericsson, "A Framework for Wide-Area Monitoring and Control Systems Interoperability and Cybersecurity Analysis," *IEEE Transactions on Power Delivery*, vol. 29, pp. 633-641, Apr 2014.
- [J-11] P. Stoll, N. Brandt, and L. Nordström, "Including dynamic CO2 intensity with demand response," *Energy Policy*, vol. 65, pp. 490-500, Feb 2014.
- [J-12] K. Zhu, M. Chenine, L. Nordström, S. Holmström, and G. Ericsson, "Design Requirements for Wide-Area Damping System: Using Empirical Data from a Utility Network," *IEEE Transactions on Smart Grid*, vol. 5, pp. 829-838, 2014.
- [J-13] K. Zhu and L. Nordström, "Design of Wide-Area Damping System based on the Capabilities of the Supporting ICT Infrastructure," *IET Generation, Transmission & Distribution*, vol. 8, pp. 640-650, 2014.