

Complete Publication list
Dr. Lina Bertling Tjernberg
<https://orcid.org/0000-0003-4763-9429>
Professor in Power Grid Technology
linab@kth.se

Summary

This is a complete list of publications for the author Dr. Lina Bertling Tjernberg (Tjernberg from 2011) (<https://orcid.org/0000-0003-4763-9429>). The publications includes the following sections:

- A papers published in journals,
- B papers published in conferences (and of those in magazines),
- C Review articles, book chapters, course material etc,
- D Other scientific contributions,
- E Other publications and reports,
- F Demos, software, copyrights, popular science contributions etc.

The complete publication list (A-D) includes: 31 journal papers, 113 conference papers, 2 books, 9 book chapters and 3 theses (all at KTH). Most of these publications are available from [IEEE Xplore Digital Library](#) or the [DIVA portal](#). Other publications (D and E) includes contributions to reports resulting from several working groups both national (e.g. IVA, [SOU 2014:84](#)) and international (e.g. IEA, IEEE, Cigré) and internal reports. The last section includes popular science articles.

An overview of academic publications are provided at [ResearchGate](#) or [Google Scholar](#) Citation indices in Google Scholar updated on 2024-06-29 with direct link of: https://scholar.google.com/citations?user=avw6_okAAAJ

	All	Since 2019
Citations	7875	3083
h-index	36	26
i10-index	96	47

List of abbreviations:

- CIRED - International Conference on Electricity Distribution.
- CIGRE- global community committed to the collaborative development and sharing of power system expertise.
- IEA - International Energy Agency.
- IEEE - Institute of Electrical and Electronics Engineers.
- ISGT – Innovative Smart Grid Technology Conference (part of IEEE)
- IVA – The Royal Academy of Science
- PES GM – Power & Energy Society General Meeting (part of IEEE)
- PMAPS - International Conference on Probabilistic Methods Applied to Power Systems.
- PSCC - Power Systems Computation Conference.
- SOU – statens offentliga utredningar (governments official investigations).

A Published in journals (or accepted to be published)

1. G. Lal Rajora, M. A. Sanz-Bobi, L. Bertling Tjernberg, J. Eduardo Urrea Cabus, [A review of asset management using artificial intelligence-based machine learning models: Applications for the electric power and energy system](#), IET Generation, Transmission, and Distribution, June 2024. <https://doi.org/10.1049/gtd2.13183>

2. F. Chen a , J. Yan, Y. Liu , Y. Yan, L. Bertling Tjernberg, [A novel meta-learning approach for few-shot short-term wind power forecasting](#), Applied Energy, Elsevier, Volume 362, 15 May 2024, 122838 <https://doi.org/10.1016/j.apenergy.2024.122838>
3. Y. Bekele, G. Biru, L. Bertling Tjernberg, [On the design and optimization of distributed energy resources for sustainable grid-integrated microgrid in Ethiopia](#), International Journal of Hydrogen Energy, Elsevier, May 2023 . <https://doi.org/10.1016/j.ijhydene.2023.04.192>.
4. Borenius, S.; Gopalakrishnan, P.; Bertling Tjernberg, L.; Kantola, R. [Expert-Guided Security Risk Assessment of Evolving Power Grids](#). Energies 2022, 15, 3237.
5. Meysam, el alt. [A deep learning-based evolutionary model for short-term wind speed forecasting: A case study of the Lillgrund offshore wind farm](#), Energy conversion and Management, Elsevier, 236 (2021), 114002.
6. M. N. Meysam, el alt. [Wind Turbine Power output Prediction Using a New Hybrid Neuro-Evolutionary Method](#), Energy, Elsevier , 229 (2021), 120617.
7. A. Heydari el alt., [A Combined Fuzzy GMDH Neural Network and Grey Wolf Optimization Application for Wind Turbine Power Production Forecasting Considering SCADA Data](#), Energies 2021, 14, 3459. <https://doi.org/10.3390/en14123459>
8. Y. Cui, P. Bangalore and L. Bertling Tjernberg, [A fault detection framework using RNNs for condition monitoring of wind turbines](#), *Wind Energy*, Wiley, 2021, 1-14. DOI: 10.1002/we.2628 .
9. Y. Li *et al.*, [Investigation on liquid cold plate thermal management system with heat pipes for LiFePO₄ battery pack in electric vehicles](#), *Applied Thermal Engineering*, vol. 185, 2021.
10. Mazidi P., Du M., Bertling Tjernberg L., Sanz-Bobi M, [Health Condition Model for Wind Turbine Monitoring through Neural Networks and Proportional Hazard Models](#), Institution of Mechanical Engineers, Journal of Risk and Reliability, Vol. 231(5), Pages: 481–494, 2017.
11. Mazidi P., Bertling Tjernberg L., Sanz-Bobi M., [Wind Turbine Prognostics and Maintenance Management based on a Hybrid Approach of Neural Networks and Proportional Hazards Model](#), Institution of Mechanical Engineers, Journal of Risk and Reliability, Vol. 231(2), Pages: 121-129, 2017
12. M. Du, L. Bertling Tjernberg, S. Ma, Q. He, L. Cheng, J. Guo, [A SOM based Anomaly Detection Method for Wind Turbines Health Management through SCADA Data](#), International Journal of Prognostics and Health Management, Vol. 7, Pages: 1-13, 2016.
13. Shafiee M., Patriksson M., Strömberg A. B., Bertling L., [Optimal Redundancy and Maintenance Strategy Decisions for Offshore Wind Power Converters](#) , International Journal of Reliability, Quality, and Safety Engineering, Vol. 22, Issue 03, June 2015.
14. S Bahramirad, A Khodaei, J Matevson, Z Li, L Bertling, EA Passo, M. Fotuhi-Firuzabad, [Guest Editorial Special Section on Asset Management in Smart Grid](#), IEEE Transactions on Smart Grid, Vol. 6, No. 2., March 2015.
15. Bangalore P., Bertling Tjernberg L, [An artificial neural network approach for early fault detection of gearbox bearings](#), IEEE Transactions on Smart Grid, Vol. 6, No. 2., March 2015.
16. Salih S. N., Chen P., Carlson O., Bertling Tjernberg L., [Optimizing wind power hosting capacity of a distribution system using costs benefit analysis](#), IEEE Transactions on Power Delivery, Vol. 29, No. 3, June 2014.
17. Wang F., Tuan L. A., Tjernberg Bertling L, Mannikoff A., Bergman A., [A New Approach for Benefit Evaluation of Multi-Terminal VSC-HVDC Using A Proposed Mixed AC/DC Optimal Power Flow](#), IEEE Transactions on Power Delivery, Vol. 29, No. 1, Feb. 2014.
18. Papaemmanouil A., Bertling Tjernberg L., Tuan L. A., Andersson G., [Improved cost-benefit analysis for market-based transmission planning, a European perspective](#), Journal on Energy Policy, ISSN 0301-4215, Aug. 2013. <https://doi.org/10.1016/j.enpol.2013.08.066>
19. Besnard F., Fischer K., Bertling Tjernberg L., [A Model for the Optimization of the Maintenance Support Organization for Offshore Wind Farms](#), IEEE Transactions on Sustainable Energy, Vol. 4, No. 2, pp. 443-450, April 2013.

20. Wang P., Gao Z. Y., Bertling L., [Operational Adequacy Studies of Power Systems With Wind Farms and Energy Storages](#), IEEE Transactions on Power Systems, Vol. 27, No. 4, pp. 2377-2384, Nov. 2012.
21. Steen, D.; Le, T., Bertling, L., Carlson, O.: [Assessment of Electric Vehicle Charging Scenarios Based on Demographical Data](#). IEEE Transactions on Smart Grid, Vol. 3, No. 3, pp. 1457-1468, Sept. 2012.
22. Fischer K., Besnard F., Bertling L.: [Reliability-Centred Maintenance for Wind Turbines Based on Statistical Analysis and Practical Experience](#). IEEE Transactions on Energy Conversion, Vol. 27, No. 1, pp. 184 – 195, March 2012.
23. Besnard, F., Bertling L.: [An Approach for Condition-Based Maintenance Optimization Applied to Wind Turbine Blades](#). IEEE Transactions on Sustainable Energy, Vol.1 No. 2, pp. 77 - 83, July 2010.
24. Wallnerström, C.; Bertling, L.; Le, T.: [Risk and reliability assessment for electrical distribution systems and impacts of regulations with examples from Sweden](#). International Journal of Systems Assurance Engineering and Management, Dec. 2010.
25. Lindquist T., Bertling L., Eriksson R., [Circuit Breaker Failure Data and Reliability Modelling](#), IET Generation, Transmission and Distribution, Nov. 2008.
26. Wallnerström C. J., Bertling L., [Investigation of the Robustness of the Swedish Network Performance Assessment Model](#), IEEE Transactions on Power Systems, Vol. 23, No. 2, pp. 773-780, May 2008.
27. Hilber P., Miranda V., Manuel M., Bertling L., [Multiobjective Optimization Applied to Maintenance Policy for Electrical Networks](#), IEEE Transactions on Power Systems, Vol. 22, No. 4, pp. 1675-1682, Nov. 2007.
28. Nilsson J., Bertling L., [Maintenance management of wind power systems using Condition Monitoring Systems –Life Cycle Cost analysis for two case studies in the Nordic system](#), IEEE Transactions on Energy Conversion, Vol. 22, No. 1, pp. 223-229, March 2007.
29. Ribrant J., Bertling L., [Survey of failures in wind power systems with a focus on Swedish wind power plants, 1997-2005](#), IEEE Transactions on Energy Conversion, Vol. 22, No. 1, pp. 167-173, March 2007.
30. Bertling L., Allan R.N., Eriksson, R., [A reliability-centred asset maintenance method for assessing the impact of maintenance in power distribution systems](#), IEEE Transactions on Power Systems, Vol. 20, No. 1, pp. 75-82, Feb. 2005.
31. Billinton R., Fotuhi-Firuzabad M., Bertling L., [Bibliography on the application of probability methods in power system reliability evaluation 1996-1999](#), IEEE Transactions on Power Systems, Vol. 16, No. 4, pp. 595-602, Nov. 2001.

B Conference paper, and magazines, with referee-system (full paper review 2-3 reviewers)

1. G. Lal Rajora, L. Bertling Tjernberg, M. A. Sanz-Bobi, Advancements and Challenges in Asset Management for HVDC Cable Systems: A Machine Learning Perspective, Proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Auckland, New Zealand, June 2024.
2. T. Elmfeldt, Y. Arafat, L. Bertling Tjernberg, A. Lugnet, and G. Nyström, [Sector-coupling Green Hydrogen to Electrify Steel Production - A Case Study at Ovako Hofors](#), Proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Auckland, New Zealand, June 2024.
3. T. Elmfeldt, Y. Arafat, L. Bertling Tjernberg, A. Lugnet, and G. Nyström, [Sector-coupling Green Hydrogen to Electrify Steel Production - A Case Study at Ovako Hofors](#), Proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Auckland, New Zealand, June 2024.
4. T. Elmfeldt, L. Bertling Tjernberg, and C. Carlsund Levin, [Pumped Storage Hydroelectricity for a Sustainable Electricity Transition – With a Case Study of Juktan Power Station](#), Proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Auckland, New Zealand, June 2024.

5. J. K. Nøland, M. Hjelmeland, L. B. Tjernberg and C. Hartmann, "[The Race to Realize Small Modular Reactors: Rapid Deployment of Clean Dispatchable Energy Sources](#)," in *IEEE Power and Energy Magazine*, vol. 22, no. 3, pp. 90-103, May-June 2024, doi: 10.1109/MPE.2024.3357468.
6. A. Dogra, L. Bertling Tjernberg, [Potential Impact of Electric Vehicles Connected to the Grid - A Pre-Study for the Swedish Power System](#), In proceedings of IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe) 2023, Grenoble.
7. Y. Bekele Beyene, G. Biru Worku, L. Bertling Tjernberg, [On Virtual Complex Impedance Droop Control of VSC-Based Islanded Microgrids](#), In proceedings of IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe) 2023, Grenoble.
8. F. Chen, J. Yan, L. Bertling Tjernberg, D. Song, Y. Yan, Y. Liu [Medium –Term Wind Power Forecasting based on Dynamic Self-Attention Mechanism](#), In proceedings of IEEE PowerTech, Belgrade, June 2023.
9. L. Bertling Tjernberg, S. Uhrig, [Lifetime Extension Options for Electrical Equipment](#), In proceedings of the CIRED 2023, Rome, June 2023.
10. L. Tunelid, M. Peri, S. Sathyamoorthy, H. Shafique, A. Rozas , L. Bertling Tjernberg, [Simplistic Revenue Based BESS Sizing Tool Developed in Python Using Historical Grid Data](#), In proceedings of IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), Novi Sad, Serbia October 2022. [10.1109/ISGT-Europe54678.2022.9960580](#)
11. Y. Bekele, G. Biru, L. Bertling Tjernberg, [Sustainable Off-grid Systems with Integration of Renewable Generation and Hydrogen-Fuel Cell](#), In proceedings of IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), Novi Sad, Serbia October 2022. [10.1109/ISGT-Europe54678.2022.9960622](#)
12. E. Holmgren, D. Haldar, L. Bertling Tjernberg, A. Johansson, [More Electric Aircraft \(MEA\) - Scaling Aspects and Weight Impact](#), 33RD Congress of the International Council of the Aeronautical Sciences (ICAS), Stockholm, Sweden, September 2022.
13. A. Johansson , M. Yildiz , L. Bertling Tjernberg, [More Electric Airplane: case study Stockholm – Copenhagen](#), 33RD Congress of the International Council of the Aeronautical Sciences (ICAS), Stockholm, Sweden, September 2022.
14. Y. Cui, P. Bangalore, and L. Bertling Tjernberg, [Fault Diagnostics of Power Transformers Using Autoencoders and Gated Recurrent Units with Applications for Sensor Failures](#), In proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Manchester, UK, June 2022.
15. H. Shafique, D.-E. Archer , R. Eriksson, L. B. Tjernberg, [Real-time Operation Model for Energy Management System of Battery Energy Storage System - Case Study: The School of Sinttorp](#), In proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Manchester, UK, June 2022.
16. J. Eduardo Urrea Cabus, Y. Cui, P. Bangalore, and L. Bertling Tjernberg, [An Anomaly Detection Approach Based on Autoencoders for Condition Monitoring of Wind Turbines](#), In proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Manchester, UK, June 2022.
17. P. Alikhani, and L. Bertling Tjernberg, P. Gopalakrishnan, P. Alikhani, H. Shafique, L. Bertling Tjernberg, J. Hallinder, A. Engstrom, Y. He, [Peak Demand Shaving Based on Solar and Load Forecasting at Port of Gävle](#), In proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Manchester, UK, June 2022.
18. H. Shafique, L. B. Tjernberg, D.-E. Archer, and S. Wingstedt, [Energy Management System \(EMS\) of Battery Energy Storage System \(BESS\) – Providing Ancillary Services](#), in *IEEE PowerTech*, Madrid, Spain, Jul. 2021, April 2021.
19. P. Alikhani, A. Mrad, H. Louie, and L. B. Tjernberg, [On the Reliability and Life Cycle Cost Analyses of Small-scale Standalone Solar Systems in Rural Areas](#), 2021 IEEE Power & Energy Society Innovative Smart Grid Technologies Conference (ISGT), USA, 2021.
20. M. Neshat, M. Majidi Nezhad, E. Abbasnejad, D. Groppi, A. Heydari, L. Bertling Tjernberg, D. Astiaso Garcia, B. Alexander, M. Wagner [Hybrid Neuro-Evolutionary](#)

- [Method for Predicting Wind Turbine Power Output](#), 4th South East European Sustainable Development of Energy, Water and Environment Systems, June-July, Sarajevo 2020. (Preprint April 2020).
21. M. Neshat, M. Majidi Nezhad, E. Abbasnejad, L. Bertling Tjernberg, D. Astiaso Garcia, B. Alexander, M. Wagner. [An evolutionary deep learning method for short-term wind speed prediction: A case study of the Lillgrund Offshore wind farm](#), 1st Asia Pacific Conference on Sustainable Development of Energy, Water and Environment Systems, Australia, April 6-9, Gold Coast, Australia, 2020. (Preprint February 2020).
 22. M. Majidi Nezhad, A. Heydari, E. Pirshayan, D. Groppi, F. Cumo, O. De Santoli, L. Bertling Tjernberg and D. Astiaso Garcia. A novel forecasting model for wind source assessment using Sentinel 1 images and machine learning method: a case study Favignana island. 12th International Conference on Sustainable Energy & Environmental Protection "SEEP 2019", The University of Sharjah, November 18-21, 2019.
 23. Q. Huang, Y. Cui, L. Bertling Tjernberg, P. Bangalore, [Wind Turbine Health Assessment Framework Based on Power Analysis Using Machine Learning Method](#), In proceedings of IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), Bucharest, Romania, September-October 2019.
 24. Y. Cui, P. Bangalore, and L. Bertling Tjernberg, [An anomaly detection approach using wavelet transform and artificial neural networks for condition monitoring of wind turbines' gearboxes](#), In proceedings of Power Systems Computation Conference (PSCC), Dublin, Ireland, June 2018.
 25. Y. Cui, P. Bangalore, and L. Bertling Tjernberg, [An anomaly detection approach based on machine learning and SCADA data for condition monitoring of wind turbines](#), In proceedings of the International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Boise, Idaho, June 2018.
 26. P. Mazidi, L. Bertling Tjernberg and M. A. Sanz-Bobi, [Performance analysis and anomaly detection in wind turbines based on neural networks and principal component analysis](#), in 12th Workshop on Industrial Systems and Energy Technologies (JOSITE17), Madrid, 2017.
 27. P. Bangalore, S. Letzgus, M. Patriksson, and L. Bertling Tjernberg, [Analysis of SCADA data for early fault detection with application to the maintenance management of wind turbines](#), SC C1 System Development and Economics, PS1/State of the Art Approaches and Standardization in Asset Management Decision Making, Cigré, Paris, August 2016.
 28. C. J. Wallnerstrom, L. B. Tjernberg, P. Hilber, J. H. Jurgensen, "[Framework for system analyses of smart grid solutions with examples from the Gotland case](#)" in PMAPS, 2016, Beijing, October 2016. DOI DOI: [10.1109/PMAPS.2016.7763923](#)
 29. P. Mazidi, M. Du, L. B. Tjernberg, M. A. Sanzi Bobi, "[A performance and maintenance evaluation framework for wind turbines](#)", in PMAPS, 2016, Beijing, October 2016. DOI DOI: [10.1109/PMAPS.2016.7763931](#)
 30. Z. Yuan, M. Reza Hesamzadeh, Y. Cui, L. B. Tjernberg, "[Applying high performance computing to probabilistic convex optimal power flow](#)", in PMAPS, 2016, Beijing, October 2016. DOI: [10.1109/PMAPS.2016.7763931](#)
 31. S. Babu, J. H. Jurgensen, C. J. Wallnerstrom, P. Hilber, L. B. Tjernberg, "[Analyses of Smart Grid Technologies and Solutions from a System Perspective](#)," in IEEE PES ISGT ASIA, 2015, Bangkok, November 2015.
 32. Y. Arafat, L. Bertling Tjernberg and P. A.. Gustafsson, "[Experience from real tests on multiple smart meter switching](#)," in IEEE PES ISGT ASIA, 2015, Bangkok, November 2015.
 33. Y. Arafat, L. Bertling Tjernberg and P. A. Gustafsson, "[Field test on multiple Smart Meter](#)

- switching to study the effect on power quality at customers level," in IEEE PowerTech, Eindhoven, June-July 2015.
34. Y. Arafat, L. Bertling Tjernberg and P. A. Gustafsson, [Possibilities of demand side management with Smart Meters](#), in 2015 CIRED Lyon, June 2015.
 35. Arafat Y., Bertling Tjernberg L., Gustafsson P.-A., [Experience from Real Tests on Multiple Smart Meter Switching](#), In Proceedings of IEEE PES ISGT Europe 2014, October 2014, Istanbul.
 36. Steen D., Balram P., Le. T., Reichenberg L., Bertling Tjernberg L., [Impact assessment of wind power and demand side management on day-ahead market price](#), In Proceedings of IEEE PES ISGT Europe 2014, October 2014, Istanbul.
 37. Bangalore P., Bertling Tjernberg L., [Self Evolving Neural Network Based Algorithm for Fault Prognosis in Wind Turbines: A Case Study](#), PMAPS 2014, Durham, July 2014.
 38. Puglia G., Bangalore P., Bertling Tjernberg L., [Cost Efficient Maintenance Strategies for Wind Power Systems Using LCC](#), PMAPS 2014, Durham, July 2014.
 39. Arafat Y., Bertling Tjernberg L., Gustafsson P. A., [Remote switching of multiple Smart Meters and steps to check the effect on the grid's power quality](#), IEEE PES Transmission & Distribution conference & exposition (T&D), April 2014, Chicago.
 40. Pinares G., Le Anh T., Bertling Tjernberg L., Breitholtz C., [Analysis of the dc Dynamics of VSC-HVDC Systems Using a Frequency Domain Approach](#), In proceedings of IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC), Hong Kong, December 2013.
 41. Balram P., Le T., Bertling L., [Modeling of Regulating Power Market Based on AC Optimal Power Flow Considering Losses and Electric Vehicles](#), In Proceedings of IEEE PES ISGT Asia, Bangalore, November 2013.
 42. Bangalore P., Bertling L., [An Approach for Self Evolving Neural Network Based Algorithm for Fault Prognosis in Wind Turbine](#), In Proceedings of IEEE PowerTech, Grenoble, June 2013.
 43. Pinares G., Bertling Tjernberg L., Anh Tuan L., Breitholtz C., Abdel-Aty E., [On the analysis of the dc dynamics of multi-terminal VSC-HVDC systems using small signal modeling](#), In proceedings of IEEE PowerTech, Grenoble, June 2013.
 44. Shafiee M., Patriksson M., Strömberg A. B., Bertling L., [A Redundancy Optimization Model Applied to Offshore Wind Turbine Power Converters](#), In Proceedings of IEEE PowerTech, Grenoble, June 2013.
 45. Wang F., Bertling L., Le T. A., Mannikoff A., Bergman A., [An Extended OPF Incorporating Multi-Terminal VSC- HVDC and its Application on Transmission Loss Evaluation](#), Published in proceedings of IEEE PowerTech, Grenoble, June 2013.
 46. Arafat Y., Bertling L., Mangold S., [Feasibility study on low voltage DC systems using smart meter data](#), In Proceedings of CIRED, Stockholm, June 2013.
 47. Steen D., Tuan L., Carlson O., Bertling L., [Evaluating the Customers' Benefits of Hourly Pricing Based on Day-Ahead Spot Market](#), In Proceedings of CIRED, Stockholm, June 2013.
 48. Saunders C., Georgiadis G., Bertling L., Papatriantafilou M., Tuan L., [Distributed Optimization-Based Control of Electrical Distribution Systems with Active Distributed Resources](#), In Proceedings of CIRED, Stockholm, June 2013.
 49. Wang F., Bertling L., Le T., Mannikoff A., Bergman A., [A Cost-Benefit Analysis of The Multi-Terminal VSC-HVDC Embedded in an AC Transmission System Using a Proposed Mixed AC/DC Optimal Power Flow](#), In Proceedings of 10th International Conference on the European Energy Market EEM13, Stockholm, May. 2013.
 50. Balram P., Tuan L. A., Bertling Tjernberg L., [Stochastic Programming Based Model of An Electricity Retailer Considering Uncertainty Associated with Electric Vehicles Charging](#), In Proceedings of 10th International Conference on the European Energy Market EEM13, Stockholm, May. 2013.
 51. Balram P., Tuan L. A., Bertling Tjernberg L., [Effects of Plug-in Electric Vehicle Charge Scheduling on the Day-ahead Electricity Market Price](#), In Proceedings of IEEE PES ISGT Europe, Berlin, October 2012.

52. Steen, D.; Tuan, L.; Bertling, L.: [Price-Based Demand-Side Management For Reducing Peak Demand In Electrical Distribution Systems – With Examples From Gothenburg](#). In proceedings of Nordic Conference on Electricity Distribution System Management and Development (NORDAC), Finland, September 2012.
53. Saunders C., Bangalore P., Bertling L., [Congestion management in active distribution grids: optimal reserve scheduling under distributed generation uncertainty](#), In Proceedings of CIRED, Lisbon, May 2012.
54. Bangalore P., Bertling L., [Extension of Test System for Distribution System Reliability Analysis with Integration of Electric Vehicles in the Distribution System](#), In Proceedings of IEEE PES ISGT EUROPE 2011, Manchester, December 2011.
55. Steen, D.; Salem, A.Y.; Le, T.; Carlson, O.; Bertling, L.: [Optimal load management of electric heating and PEV loads in a residential distribution system in Sweden](#). In Proceedings of IEEE PES ISGT EUROPE 2011, Manchester, December 2011.
56. Feng, W., Bertling, L., Tuan L.; Mannikoff, A., Bergman, A.: [An Overview Introduction of VSC-HVDC: State-of-art and Potential Applications in Electric Power Systems](#). In Proceedings of CIGRE International Symposium on "The Electric Power System of The Future: Integrating supergrids and microgrids", Bologna, September 2011.
57. Bertling, L.; Bangalore P.; Tuan L.: [On the use of reliability test systems: A literature survey](#), In Proceedings of IEEE PES GM, Detroit, July 2011, ISBN/ISSN: 978-1-4577-1000-1.
58. Z. Y. Gao, P. Wang, L. Bertling and J. H. Wang, [Sizing of Energy Storage for Power Systems with Wind Farms Based on Reliability Cost and Worth Analysis](#), In Proceedings of IEEE PES GM, Detroit, July 2011.
59. Papaemmanouil A.; Bertling, L.; Le, T.; Andersson, G.: [Improved cost-benefit analysis for reliable long-term transmission planning](#). In Proceedings of IEEE PES PowerTech, Trondheim, June 2011, ISBN/ISSN: 978-142448419-5.
60. Besnard, F.; Patriksson, M.; Strömberg, A.B.; Wojciechowski, A.; Fischer, K.; Bertling, L.: [A stochastic model for opportunistic maintenance planning of offshore wind farms](#). 2011 IEEE PES PowerTech., Trondheim, June 2011, ISBN/ISSN: 978-142448419-5
61. Steen, D.; Le, T.; Ortega-Vazquez, Mi.; Carlson, O.; Bertling, L.; Neimane V.: [Scheduling Charging of Electric Vehicles for Optimal Distribution Systems Planning and Operation](#). In Proceedings of CIRED, Frankfurt, June 2011.
62. Fischer, K.; Besnard, F.; Bertling, L.: [A Limited-Scope Reliability-Centred Maintenance Analysis of Wind Turbines. In Scientific Proceedings of the European Wind Energy Conference & Exhibition \(EWEA\) 2011, Brussels, March 2011.](#)
63. Babaei, S.; Steen, D.; Le, T.; Carlson, O.; Bertling, L.: [Effects of Plug-in Electric Vehicles on Distribution Systems: The Real Case of Gothenburg](#). In Proceedings of IEEE PES ISGT Europe 2010, Gothenburg, October 2010, ISBN/ISSN: 978-142448510-9
64. Besnard, F.; Fischer, K.; Bertling, L.: [Reliability-Centred Asset Maintenance – A step towards enhanced reliability, availability, and profitability of wind power plants](#). In Proceedings of IEEE PES ISGT Europe 2010, October 2010, Gothenburg, ISBN/ISSN: 978-142448510-9
65. Olsson, J.; Skoglund, L.; Carlsson, F.; Bertling, L.: [Future wind power production variations in the Swedish power system](#). In Proceedings of IEEE PES ISGT Europe 2010, October 2010, Gothenburg, ISBN/ISSN: 978-142448510-9.
66. Wallnerström, C.J.; Bertling, L.: [Learning from experiences of the prior swedish electrical distribution system regulation - Reference material when developing the future regulatory incentives](#). In Proceedings of IEEE PES ISGT Europe 2010, October 2010, Gothenburg, ISBN/ISSN: 978-142448510-9
67. Nguyen, P.; Kling, W.; Georgiadis, G.; Papatriantafilou, M.; Le, T.; Bertling, L.: [Distributed routing algorithms to manage power flow in agent-based active distribution network](#). In Proceedings of IEEE PES ISGT Europe 2010, October 2010, Gothenburg, ISBN/ISSN: 978-142448510-9.
68. Yunus, K., Pinares, G.; Le, T.; Bertling, L.: [A Combined Zone-3 Relay Blocking and Sensitivity-Based Load Shedding for Voltage Collapse Prevention](#). In Proceedings of

- IEEE PES ISGT Europe 2010, October 2010, Gothenburg, ISBN/ISSN: 978-142448510-9.
69. Bertling, L.; Bangalore P., [On the use of reliability test systems: A literature survey](#), In Proceedings of IEEE PES GM, Minneapolis, July, 2010, ISBN/ISSN: 978-142448357-0.
 70. Nilsson, J.; Wojciechowski, A.; Strömberg, A.B.; Patriksson, M.; Bertling, L.: [An evaluation approach for opportunistic maintenance optimization models for nuclear power plants](#). In Proceedings of IEEE PES GM, Minneapolis, July 2010, ISBN/ISSN: 978-142448357-0.
 71. Papaemmanouil, A.; Le, T.; Andersson, G.; Bertling, L.; Johnsson, F.: [A cost-benefit analysis of transmission network reinforcement driven by generation capacity expansion](#). In Proceedings of IEEE PES GM, Minneapolis, July 2010, ISBN/ISSN: 978-142448357-0.
 72. Babaei, S.; Le, T.; Bertling, L.; Carlson, O.: Effects of PHEVs in power distribution systems: reviews and analyses. In Proceedings of CIREN Workshop on Sustainable Distribution Asset Management and Financing, Lyon, June 2010.
 73. Besnard, F.; Nilsson, J.; Bertling, L.: [On the economic benefits of using condition monitoring systems for maintenance management of wind power systems](#). In Proceedings of 2010 IEEE 11th PMAPS, June 2010, Singapore, ISBN/ISSN: 978-142445723-6
 74. Wallnerström, C.J.; Bertling, L.: [Laws and regulations of Swedish power distribution systems 1996-2012 - learning from novel approaches such as less good experiences](#), In proceedings of CIREN Workshop on Sustainable Distribution Asset Management and Financing, Lyon, June 2010.
 75. Wallnerström, C.J.; Setréus, J.; Hilber, P.; Tong, F.; Bertling, Lina: [Model of capacity demand under uncertain weather](#). In Proceedings of 2010 IEEE 11th PMAPS, Singapore, June 2010, ISBN/ISSN: 978-142445723-6
 76. Besnard, F.; Patriksson, M.; Strömberg, A.B.; Wojciechowski, Adam; Bertling, L.: [An optimization framework for opportunistic maintenance of offshore wind power system](#). In Proceedings of IEEE PowerTech, Bucharest, July 2009.
 77. Setréus J., Arnborg S., Eriksson R., Bertling L., [Components' Impact on Critical Transfer Section for Risk Based Transmission System Planning](#), In Proceedings of IEEE PowerTech, Bucharest, July 2009.
 78. Istardi, D.; Abba-Aliyu, S.; Bergqvist, A.; Rouch, N.; Abdalrahman, Adil; Le, T.; Bertling, L.: [Understanding Power System Voltage Collapses Using ARISTO: Effects of Protection](#). In Proceedings of IEEE PowerTech, Bucharest, July 2009.
 79. Nilsson, J.; Patriksson, M.; Strömberg, A.B.; Wojciechowski, A.; Bertling, L.: [An opportunistic maintenance optimization model for shaft seals in feed-water pump systems in nuclear power plants](#). In Proceedings of IEEE PowerTech, Bucharest, July 2009.
 80. Wallnerström, C.J.; Bertling, L.: Risk management applied to electrical distribution systems, In Proceedings of CIREN, Prague, June 2009.
 81. Lindquist T., Bertling L., [Hazard Rate Estimation for High-Voltage Contacts using Infrared Thermography](#), Reliability And Maintainability Symposium (RAMS), 2008, ^[1]_[SEP]^[1]_[SEP]
 82. Hilber P., Bertling L., [Multiobjective Maintenance Policy for a Distribution System an Application Study](#), In Proceedings of 10th PMAPS 2008, Puerto Rico, June 2008.
 83. Wallnerström, C.J., Hasselström, J., Bengtsson, P., Bertling, L., [Review of the Risk Management at a Distribution System Operator](#), In Proceedings of 10th PMAPS 2008, June Puerto Rico, June 2008.
 84. Setréus J., Bertling L., [Introduction to HVDC Technology for Reliable Electrical Power Systems](#), In Proceedings 10th PMAPS, Puerto Rico, June 2008.
 85. Leelaruij R., Setréus J., Olguin, G., Bertling, L. [Availability Assessment of the HVDC Converter Transformer System](#), In Proceedings 10th PMAPS, Puerto Rico, June 2008.
 86. Hilber P., Bertling L., [Component Reliability Importance Indices for Electrical Networks](#), In the Proceedings of the 8th International Power Engineering Conference (IPEC), Singapore, December 2007.
 87. Lindquist T., Bertling L., A method for calculating disconnecter contact availability as a function of thermography inspection intervals and load current, In the Proceedings of the

- Cigré Symposium on System Development and Asset Management under Restructuring, Japan, December 2007.
88. Wallnerström C. J., Bertling L., A Sensitivity Study of the Swedish Network Performance Assessment Model Investigating Effects of Changes in Input Data, In the Proceedings of CIGRE, Vienna, May 2007.
 89. Setréus J., Wallnerström C. J., Bertling L., A Comparative Study of Regulation Policies for Interruption of Supply of Electrical Distribution Systems in Sweden and UK, In the Proceedings of CIGRE, Vienna, May 2007.
 90. Setréus J., Bertling L., Gargari S. M., Simulation Method for Reliability Assessment of Electrical Distribution Systems, In the Proceedings of the Nordic Distribution and Asset Management Conference (NORDAC), Stockholm, August 2006.
 91. Heggset J., Solvang E., Bertling L., Christensen J., Engen H., Bakken K.R, Pylvänäinen J., Hasseltröm J., Failure models for network components as a basis for asset management, In the Proceedings of the Nordic Distribution and Asset Management Conference (NORDAC), Stockholm, August 2006.
 92. Hilber P., Bertling L., Hällgren B., [Effects of Correlation Between Failures and Power Consumption on Customer Interruption Cost](#), In the Proceedings of the 9th PMAPS, Stockholm, June 2006.
 93. Chowdhury A., Bertling L., Custer D. E., [Determining Distribution Substation Transformer Optimal Loading Using a Reliability Cost-Benefit Approach](#), in the Proceedings of the 9th PMAPS, Stockholm, June 2006.
 94. Chowdhury A., Bertling L., Glover B. P., Haringa G. E., [A Monte Carlo Simulation Model for Multi-Area Generation Reliability Evaluation](#), in the Proceedings of the 9th PMAPS, Stockholm, June 2006.
 95. Chowdhury A., Bertling L., [Distribution System In-Depth Causal Reliability Assessment](#), Proceedings of the 9th PMAPS, Stockholm, June 2006.
 96. Chowdhury A., Bertling L., Glover B. P., [Causal and Seasonal Analysis of Bulk Transmission Line Forced Outages Using the MAPP Outage Database](#), in the Proceedings of the 9th PMAPS, Stockholm, June 2006.
 97. Hilber P., Bertling L., A method for extracting importance indices from reliability simulations of electrical networks, in the Proceedings of the 15th PSCC, August 2005.
 98. Bertling L., Larsson M.B-O., Wallnerström C. J., [Evaluation of the customer value of component redundancy in electrical distribution systems](#), In the Proceedings of IEEE PowerTech, St. Petersburg, June 2005.
 99. Lindquist T., Bertling L., Eriksson R., [Estimation of disconnecter contact condition for modeling the effect of maintenance and ageing](#), In the Proceedings of IEEE PowerTech, St. Petersburg, June 2005.
 100. Hilber P., Hällgren B., Bertling L., [Optimizing the replacement of overhead lines in rural distribution systems with respect to reliability and customer value](#), In the Proceedings of the CIGRE in Turin, June 2005.
 101. Lindquist T., Bertling L., Eriksson R., [A Method for Age Modelling of Power System Components based on Experiences from the Design Process with the purpose of Maintenance Optimization](#), In the Proceedings of the Reliability and Maintainability Annual Symposium (RAMS), January 2005.
 102. Task Force on Probabilistic Aspects of Reliability Criteria of the IEEE PES Reliability, Risk, and Probability Applications Subcommittee McCalley J. (chair), Asgarpoor S., Bertling L., Billinton R., Breipohl A., Chao H., Chen J., Endrenyi J., Fletcher R., Ford A., Grigg C., Hamoud G., Logan D., Meliopoulos A. P., Ni M., Rau N., Salvaderi L., Schilling M., Schlumberger Y., Schneider A., Singh C. [Probabilistic security assessment for power system operations](#), In the Proceedings of the IEEE PES General Meeting, Denver, July 2004.
 103. Endrenyi J., Anders G., Bertling L., Kalinowski B., [Comparison of Two Methods for Evaluating the Effects of Maintenance](#), Invited paper to special session at the 8th International Conference on Probabilistic Methods Applied to Power Systems (PMAPS), Ames, Iowa, September 2004.

104. Hilber P., Bertling L., [Monetary importance of component reliability in electrical networks for maintenance optimization](#), In the Proceedings of PMAPS, Ames, Iowa, September 2004.
105. Lindquist T., Bertling L., Eriksson R., [A Feasibility Study for Probabilistic Modeling of Aging in Circuit Breakers for Maintenance Optimization](#), In the Proceedings of PMAPS, Ames, Iowa, September 2004.
106. Bertling L., Eriksson R., Allan R.N., Impact of maintenance on cost and reliability of distribution systems, In the Proceedings of the 17th CIRED, Barcelona, May 2003.
107. Eriksson R., Lindquist T., Bertling L., Reliability modelling of aged XLPE cables, In the Proceedings of Nordic Insulation Symposium (Nord-Is), Tampere, June 2003.
108. Bertling L., Eriksson R., Allan R.N., Gustafsson L.Å., Åhlén M., Survey of Causes of Failures Based on Statistics and Practice for Improvements of Preventive Maintenance Plans, In the Proceedings of the 14th PSCC, Seville, June 2002.
109. Bertling L., Eriksson R., Allan R.N., [Relation between preventive maintenance and reliability for a cost-effective distribution system](#), In the Proceedings of IEEE PowerTech, Porto, September 2001.
110. Bertling L., Andersson G., Allan R.N., Demonstrating the benefit of reliability centred maintenance (RCM) on the reliability in distribution systems, In the Proceedings of PMAPS, Madeira, September 2000.
111. Bertling L., Andersson G., Allan R.N., The Impact of Preventive Maintenance on the Reliability in Electrical Distribution Systems, In the Proceedings of the 34th Universities Power Engineering Conference (UPEC), Leicester, September 1999.
112. Bertling L., Andersson G., Allan R.N., [Reliability Centered Maintenance Applied to Electrical Distribution Systems](#), In the Proceedings of the IEEE Power Tech, Budapest, August 1999.
113. Bertling L., He Y., Andersson G., Allan R.N., Modelling and Evaluating the Effect of Automatic and Remote Control on the Reliability of Distribution Systems, In the Proceedings of the 13th PSCC, Trondheim, June 1999.

C Review articles, books, book chapters and course material etc

Book and book chapters

Books

1. J. Tietjen, M. D. Ilic, L. Bertling Tjernberg, N. N. Schulz (Eds.), [Women in Power Research and Development Advances in Electric Power Systems](#). Springer Cham, DOI <https://doi.org/10.1007/978-3-031-29724-3> , July 2023.
2. L. Bertling Tjernberg, [Infrastructure Asset Management with Power System Examples](#), CRC Press Taylor and Francis, *First Edition*, <https://doi.org/10.1201/9781351057417>, April 2018.

Book chapters

1. L. Bertling Tjernberg, H. Shafique (2023), Chapter 17, [The flexible grid infrastructure enabling power grid evolution and decarbonization](#) In Urban F. and Nordensvärd J. (Eds) Handbook on Climate Change and Technology, Edward Elgar Publishing, <https://doi.org/10.4337/9781800882119.00029> (pp 274-290), December 2023.
2. L. Bertling Tjernberg, (2023). [Reliability-Centered Asset Management with Models for Maintenance Optimization and Predictive Maintenance: Including Case Studies for Wind Turbines](#) In J. Tietjen, M. D. Ilic, L. Bertling Tjernberg, N. N. Schulz (Eds.), [Women in Power Research and Development Advances in Electric Power Systems](#). (pp. 87-155) Springer Cham, DOI <https://doi.org/10.1007/978-3-031-29724-3> July 2023.
3. Y. Cui, J. Eduardo Urrea Cabus, L. Bertling Tjernberg, (2023). [A Fault Detection Approach Based on Autoencoders for Condition Monitoring of Wind Turbines](#), In K. .

- Wang, J. Tietjen, (Eds.), [Women in Renewable Energy](#). (pp. 93-211), Springer Cham, DOI <https://doi.org/10.1007/978-3-031-28543-1> June 2023.
4. Bertling Tjernberg, L. (2022). What is electricity? In F. Brounéus & C. Duwig (Eds.), [Towards the energy of the future – the invisible revolution behind the electrical socket](#). (pp. 99–110). BoD – Books on Demand.
 5. Bertling Tjernberg, L. (2022). Sustainable electricity grids – a prerequisite for the energy system of the future. In F. Brounéus & C. Duwig (Eds.), [Towards the energy of the future – the invisible revolution behind the electrical socket](#). (pp. 99–110). BoD – Books on Demand.
 6. [Application of Smart Grid Technologies, Elsevier](#), Academic Press, Chapter 11, Pages 373–393, June 2018.
 - a. Analysis of the future power system's ability to enable sustainable energy - Using the case system of Smart Grid Gotland, C. J. Wallnerström, L. Bertling Tjernberg)
 7. [Smart Grid Handbook](#), John Wiley & Sons, Ltd., August 2016.
 - a. Chapter on: [Condition Monitoring and Asset Management of Smart Grid](#), Bangalore P., Bertling Tjernberg L.,). DOI [10.1002/9781118755471.sgd061](https://doi.org/10.1002/9781118755471.sgd061)
 8. [Plug in Electric Vehicles in Smart Grids](#), Chapter 9, pp 267-299, Springer Science and Media, 2015.
 - a. [Centralized Charging Control of Plug-in Electric Vehicles and Effects on Day-Ahead Electricity Market Price](#) Balram P., Le T., Bertling Tjernberg L.,
 9. [Application of the graph theory in managing power flow in future electric networks. Graph Theory](#), INTECH Open Access Publisher, ISBN/ISSN: 979-953-307-303-2, 2011.
 - a. Chapter on [Application of the graph theory in managing power flow in future electric networks. Graph Theory](#), Nguyen, P.; Kling, W.; Georgiadis, G.; Papatriantafidou, M.; Le, T.; Bertling, L.:

Course material

1. Bertling Tjernberg L, "EI2525 Electric Power Engineering Project 2020", ISBN: 978-91-7873-784-0, KTH EECS, Internal report January 2021.
2. Bertling Tjernberg L., "[ENM125 Sustainable Electric Power Systems -summary of lecture notes 2012](#)", Chalmers, January 2013.
3. Bertling L., Wallnerström C. J, "Exercises on reliability assessment of electric power systems", TRITA-EE 2007:067, KTH School of Electrical Engineering, October 2007.
4. Bertling L., Lehtonen M., "Maintenance management in power systems – course material", TRITA-EE 2007:043, KTH School of Electrical Engineering, July 2007.
5. Bertling L., Patriksson M., "Mathematical optimization models for maintenance management - course material", IR-EE-ETK 2007:011, KTH School of Electrical Engineering, July 2007.
6. Bertling., "Reliability assessment of electrical power systems – course material", IR-EE-ETK 2007:003, KTH School of Electrical Engineering, June 2007.
7. Bertling L., Alvehag K., Nilsson N., and Setréus J., "Reliability assessment of electrical power systems – project reports 2006", IR-EE-ETK 2006:059, KTH School of Electrical Engineering, August 2006.
8. Bertling L., Lehtonen M., "Asset Management in power systems", Course material, A-ETS/EEK-0505, KTH School of Electrical Engineering, September 2005.
9. Bertling L., "Reliability assessment of electrical power systems – course material for Vattenfall Eldistribution", A-ETS/EEK-0504, KTH School of Electrical Engineering, August 2005.
10. Bertling L., "Reliability assessment of electrical power systems – course material", ("Tillförlitlighetsanalys av elkraftsystem 2C4030/2C1135 – föreläsningsnoter VT 2005"), A-ETS/EEK-0501, KTH School of Electrical Engineering, May 2005. (In Swedish)
11. Bertling L. "Reliability assessment of electrical power systems – course material" ("Tillförlitlighetsanalys av elkraftsystem 2C4030 – föreläsningsnoter VT 2004"), KTH/ETS, A-ETS/EEK-0401, KTH School of Electrical Engineering, Maj 2004. (In Swedish)

- Bertling L., "Technical Economical Dimensioning of Electrical Distribution Power systems - Project tasks", ("Teknisk ekonomisk dimensionering - projektuppgifter"), Course material for STF Ingenjörutbildning and the course on "Power System Technique for distribution system analysis" Part III) A-EES-0105, KTH School of Electrical Engineering, 2001.(In Swedish)

D Other scientific contributions

Contributions in international working group reports of CIGRE and CIRED

- CIRED WG 2020-1: *Lifetime extension options for electrical equipment*. L. Bertling Tjernberg (SWE), S. Uhrig (DE), 2023. [CIRED • Lifetime extension - WG 2020-1](#)
- CIGRE WG B4-60: Designing HVDC Grids for Optimal Reliability and Availability performance, N. MacLeod (GB), 2018.
- CIGRE WG B5.40 Education, Qualification and Continuing Professional Development of Engineers in Protection and Control, Convenor Mladen Kezunovic (US), October 2014.
- CIGRE WG 601 of Study Committee C4, Review of the current status of tools and techniques for risk based and probabilistic planning in power systems, Convener Poyan Pourbeik (US), March 2010.

Contributions in national group reports of IVA (summary in English)

- Leveranssäkerhet inom elförsörjningen – en delrapport Report from IVA Project Vägval EI, Chair: Bo Normark, IVA, April 2017, Stockholm. The report is available in pdf from <http://www.iva.se/publicerat/leveranssakerhet-inom-elforsorjningen--en-delrapport/>
- Fem vägval för Sverige Syntesrapport, Report from IVA Project Vägval EI, Chair: Bo Normark, IVA, June 2016, Stockholm. The report is available in pdf from <http://www.iva.se/globalassets/rapporter/vagval-el/201606-iva-vagvalel-slutrapport-j.pdf>
- Forskningens framtid – ämnesöversikt naturvetenskap och teknik, the Swedish Research Council (VR), 2015. (writer for the section Electrical Engineering: L. Bertling) https://publikationer.vr.se/produkt/forskningens-framtid-amnesoversikt-2014-naturvetenskap-och-teknikvetenskap/?_ga=2.66090985.67182381.1513164015-623750110.1513164015
- Smarta Energisystem - Hinder och möjligheter att nå en halverad energianvändning till 2050, Report from IVA Project Ett Energieffektivt samhälle, Chair: Bo Normark, IVA, January 2014, Stockholm. The report is available in pdf from <http://www.iva.se/globalassets/rapporter/ett-energieffektivt-samhalle/201308-iva-energieffektivisering-rapport3-h1.pdf>
- Vägval för framtidens teknikutveckling, Report from IVA Projekt Vägval Energi, Chair: Lennart Billfalk, IVA, March 2009, Stockholm. The report is available in pdf from <http://issuu.com/iva-publikationer/docs/vagvalenergi-teknikutveckling>

E Other publications and reports

- Planera för effekt!, Slutbetänkande från Samordningsrådet för smarta elnät, SOU 2014:84, 2014. The report is available in pdf from <http://issuu.com/iva-publikationer/docs/vagvalenergi-teknikutveckling> .
- L. Bertling Tjernberg , The smart grid experience in Europe, IEEE Smart Grid News Letter, August 2014, <http://smartgrid.ieee.org/august-2014/1132-the-smart-grid-experience-in-europe> .

3. L. Bertling Tjernberg, Panel on Experience of Smart Grid in Europe, IEEE ISGT US, Washington DC, January 2014.
http://sites.ieee.org/isgt2014/files/2014/03/Day2_Panel2A_Tjernberg_Opening.pdf
4. K. Chatziioannou, J. Guštinčić, L. Bertling Tjernberg, [On experience of smart grid projects in Europe and the Swedish demonstration projects](#), Chalmers, Internal Report, June 2013.
5. Bertling Tjernberg L., Wennerhag P., [Wind turbine operation and maintenance – Survey of the development and research needs](#), Elforsk report 12:41 October 2012.
6. Bertling, L.: [Final Program of 2010 IEEE PES Innovative Smart Grid Technologies Conference Europe](#). In Proceedings IEEE PES ISGT Europe, October 2010, Gothenburg, ISBN/ISSN: 978-1-4244-8510-9
7. Bertling, L.; Carlson, O.; Lundmark, S.; Steen, D.: Integration of plug in hybrid electric vehicles and electric vehicles - Experience from Sweden (Panel). In Proceedings of IEEE PES GM, Minneapolis, July 2010, ISBN/ISSN: 978-142448357-0.
8. Fischer, K.; Bertling, L.: RCM analysis of the wind turbines Vestas V44-600kW and V90 2MW, Report at the Division of Electric Power Engineering, Department of Energy and Environment, Chalmers, Gothenburg, January 2011.
9. Bertling L. (editor), Anders G., Endrenyi J., Li W., Jardine A., and Cliteur G., Tutorial book on Asset Management - Maintenance and Replacement Strategies at the IEEE PES GM 2007, IR-EE-ETK 2007:004, KTH School of Electrical Engineering, June 2007.
10. Bertling L., Ackermann T., Nilsson J., Ribrant J., [Förstudie om tillförlitlighetsbaserat underhåll för vindkraftssystem – fokus på metoder för tillståndskontroll](#) (Pre-study on reliability-centered maintenance for wind power systems with focus on condition monitoring systems). Elforsk report 06:39, May 2006.
11. Billinton R., Fotuhi-Firuzabad M., Bertling L., [Bibliography on the application of probability methods in power system reliability evaluation 1996-1999](#), IEEE Power Engineering Review, Vol. 21, No. 8 , pp. 56, Aug. 2001

Theses

1. Bertling L., "Reliability Centred Maintenance for Electric Power Distribution Systems", Doct. Thesis. KTH, Stockholm. ISBN 91-7283-345-9, TRITA-ETS-2002-01, ISSN 1650-674X, 2002.
2. Bertling L., "On Reliability Assessment of Distribution Systems and Reliability Centred Maintenance", Licentiate Thesis, Department of Electrical Engineering, KTH, Stockholm, TRITA-EES-9902, ISSN 1100-1607, 1999.
3. Bertling L., "Reliability analysis of verification processes", Master thesis, Department of Mathematics, KTH, 1997.

Internal reports at KTH

1. M. Trogen Pahlén, L. Bertling Tjernberg, [KTH Energiplattform 2019-2024 Dokumentation av kommunikation](#), TRITA-EECS-RP-2024:5, KTH School of Electrical Engineering and Computer Science , TRITA-EE 2017:047, June, 2024
2. L. Bertling, P. Hilber, J. Jensen, J. Setréus, C. J. Wallnerström, "RADPOW development and documentation", KTH School of Electrical Engineering , TRITA-EE 2017:047, March 2008.
3. Franzén A., Bertling L., "State of the art life time modeling and magement of transformers", TRITA-EE 2007:041, KTH School of Electrical Engineering, August 2007.
4. Bertling L., Wallnerström C. J., "Evaluation of the reliability of the Network performance assessment model (NPAM)" ("Nätnyttomodellens tillförlitlighet med avseende på små förändringar i indata), TRITA-EE 2006:056, KTH School of Electrical Engineering, December 2006.

5. Wallnerström C. J, Bertling L., "Känslighetsanalys av Nätnyttomodellens indata - En analys av 2005 års version av Nätnyttomodellen och dess parametrar för autentiska indata", E-ETS/EEK-0506, September 2005.
6. Bertling L., "Utvärdering av RCM med kvantitativ metod – en studie av införandet av RCM för Vattenfalls vattenkraftstationer", (In Swedish), Project description, KTH/ETS, April 2004.
7. Bertling L., "Projektbeskrivning av examensarbete för Carl Johan Wallnerström – en jämförande studie av tillförlitlighetsmodeller för elnät speciellt med avseende på metod i nätnyttomodellen", (In Swedish), KTH/ETS, July 2004.
8. Bertling L., "Research plan for the project on: reliability centred asset management for electric power systems (RCAM)", Department of Electrical Engineering, KTH, Stockholm. Report 23030/2-2002, November 2002.
9. Bertling L., "RCM-studie Birka Nät och KTH - en studie av felorsaker baserad på statistik och praktik", (In Swedish), English title: "RCM-study Birka Nät and KTH - A study of causes of failures based on statistics and practice", A-EES-0104, Department of Electrical Engineering, KTH, 2001.
10. Bertling L., "Scopes and objectives of the RCM-study at Birka Energy", A-EES-0102, Department of Electrical Engineering, KTH, 2001.
11. Bertling L., "Status report for the computer program RADPOW", A-EES-0008, Department of Electric Power Engineering, KTH, July 2000.
12. Bertling L., "Research activities for the RCM project", A-EES-9910, Department of Electric Power Engineering, KTH, December 1999.
13. Bertling L., "Reliability Centered Maintenance (RCM)", A-EES-9806, Department of Electric Power Engineering, KTH, 1998.
14. Bertling L., He Y., "A Listing of Existing Computer Programs for Reliability Assessment of Electrical Distribution Systems", A-EES-9814, Department of Electric Power Engineering, KTH, 1998.
15. He Y., Bertling L., "The Verification of the Reliability Assessment Computer Program RADPOW", A-EES-9808, Department of Electric Power Engineering, KTH, 1998.
16. He Y., Bertling L., "The User's Manual for the Reliability Assessment Computer Program RADPOW", A-EES-9809, Department of Electric Power Engineering, KTH, 1998.
17. Bertling L., He Y., "The General C++ Programming Rules for the Reliability Assessment Computer Program RADPOW", A-EES-9804, Department of Electric Power Engineering, KTH, 1998.
18. He Y., Bertling L., "The Specifications for the Reliability Assessment Computer Program", A-EES-9712, Department of Electric Power Engineering, KTH, 1998.
19. He Y., Bertling L., "Comparative Study of Reliability Assessment of Electrical Distribution System", A-EES-9705, Department of Electric Power Engineering, KTH, 1997.
20. He Y., Bertling L., "Distribution System Model used in the Reliability Assessment Computer Program", A-EES-9713, Department of Electric Power Engineering, KTH, 1997.

F Demos, software, copyrights, popular science contributions etc

Software

1. RADPOW - The Reliability Assessment Computer Program, 2002, KTH. (See details in Technical Reports listed in D).

Popular science contributions

2. L. Bertling Tjernberg, Sustainable power systems – the future energy system. (In Swedish: Uthålliga elkraftnät – framtidens energisystem), page 18-19, Fysikaktuell, Nr 1, February 2023, Svenska Fysikersambundet, (Link to pdf of the magazine from [FA-1-2023_webb.pdf \(fysikersambundet.se\)](https://www.fysikersambundet.se/FA-1-2023_webb.pdf))

3. L. Bertling Tjernberg, The energy of the future is spelled Smart Grid. (In Swedish: Framtidens energi stavas smarta elnät), Page 26-27, [IVA Aktuellt Nr 4](#), September 2013. Link with pdf of the magazine from [here](#).
4. L. Bertling, L. Söder, Different time scales for studies of power system performance, North European Perspectives (NEPP), Fact Sheets, September 2011. Web [NEPP - North European Energy Perspectives Project](#).