

Accuracy of voltage instrument transformers for harmonic measurements in Elering's 330-kV-transmission network

Meyer, Jan; Stiegler, Robert; **Kilter, Jako** PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 85-90 : ill
<https://doi.org/10.1109/PQ.2016.7724094>

Adaptive chaotic class topper optimization to solve Non-convex CHPED problems in power systems

Gupta, Pradeep Kumar; Tuttlberg, Kaur; Kilter, Jako 2024 IEEE PES Innovative Smart Grid Technologies - Asia (ISGT Asia) 2024 / 6 p. <https://doi.org/10.1109/ISGTAsia61245.2024.10876314>

An adaptive class topper optimization for scheduling thermal generation with cubic fuel cost function

Gupta, Pradeep Kumar; Gupta, Anju Kumari; Tuttlberg, Kaur; Kilter, Jako 2025 15th International Conference on Power, Energy, and Electrical Engineering (CPEEE) 2025 / p. 195-199 <https://doi.org/10.1109/CPEEE64598.2025.10987339>

Advanced condition monitoring method for high voltage overhead lines based on visual inspection

Manninen, Henri; Kilter, Jako; Landsberg, Mart 2018 IEEE Power & Energy Society General Meeting (PESGM 2018) : Portland, Oregon, USA, 5-10 August 2018 2018 / p. 2321-2325 : ill <https://doi.org/10.1109/PESGM.2018.8586498>

Advanced methodology for estimation of value of lost load (VOLL) using equipment specific health indices

Manninen, Henri; Kilter, Jako; Landsberg, Mart 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, Estonia, June 12-15, 2019 : proceedings 2019 / 6 p <https://doi.org/10.1109/PQ.2019.8818245>

Aggregated demand-side energy flexibility : a comprehensive review on characterization, forecasting and market prospects

Plaum, Freddy; Ahmadiyahangar, Roya; Rosin, Argo; Kilter, Jako Energy reports 2022 / p. 9344-9362
<https://doi.org/10.1016/j.egyr.2022.07.038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Air-core inductive current sensor for fast transients measurements in distribution networks

Kütt, Lauri; Järvik, Jaan; Kilter, Jako; Shafiq, Muhammad; Lehtonen, Matti PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 249-252 : ill
https://www.researchgate.net/publication/261507011_Air-core_inductive_current_sensor_for_fast_transients_measurements_in_distribution_networks

Alalisvooluülekande türistorventiilid. Osa 2, Terminoloogia [Võrguteavik] = Thyristor valves for high-voltage direct current (HVDC) power transmission. Part 2, Terminology (IEC 60700-2:2016+IEC 60700-2:2016/AMD1:2021)

2022 https://www.ester.ee/record=b5485873*est

Alalisvooluülekande türistorventiilid. Osa 2, Terminoloogia [Võrguteavik] = Thyristor valves for high-voltage direct current (HVDC) power transmission. Part 2, Terminology (IEC 60700-2:2016)

2020 https://www.ester.ee/record=b5329543*est

Alalisvooluülekande [Võrguteavik] : sõnastik = High-voltage direct current (HVDC) transmission : vocabulary (IEC 60633:2019)

2020 https://www.ester.ee/record=b5307917*est

Ameliorated quantum class topper optimization to solve economic load dispatch problems

Gupta, Pradeep Kumar; Kumari Gupta, Anju; Tuttlberg, Kaur; Kilter, Jako 2024 3rd International Conference on Energy Transition in the Mediterranean Area (SyNERGY MED) 2024 / 5 p <https://doi.org/10.1109/SyNERGYMED62435.2024.10799422>

Analysis of the applicability of PMU measurements for power quality assessment

Löper, Mari; Trummal, Tarmo; Kilter, Jako 2018 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe), Sarajevo, Bosnia and Herzegovina, October 21-25, 2018 : proceedings 2018 / 6 p
<https://doi.org/10.1109/ISGTEurope.2018.8571618>

Analysis of the traction system impact on voltage unbalance distribution in public electric networks

Sarnet, Tanel; Kilter, Jako 13th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 14-19, 2013 2013 / p. 238-241 : ill

Analysis of transmission network short cable line sheath bonding methods

Kangro, Triin; Kilter, Jako 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (IEEEIC / I&CPS Europe), 12-15 June 2018 : conference proceedings 2018 / 6 p.: ill
<https://doi.org/10.1109/IEEEIC.2018.8493944>

Andmete- ja andmesidekvaliteedi suurendamine faasimõõteseadmete (PMU) lisamisega Eesti ülekandevõrgu alajaamadesse

Kilter, Jako; Leinakse, Madis 2022

Application of transfer learning for instrument transformer condition monitoring

Asefi, Sajjad; Kilter, Jako; Akroud, Nabil; Hurtado, Aritz; Gilbert, Ian; Orue, Inaki 2024 International Conference on Diagnostics in Electrical Engineering (Diagnostika) 2024 / 4 p <https://doi.org/10.1109/Diagnostika61830.2024.10693903>

Assessment of corona loss performance on aging transmission lines using PMU measurements

Gupta, Pradeep Kumar; Tuttelberg, Kaur; Kilter, Jako Energy reports 2023 / p. 215-219 <https://doi.org/10.1016/j.egy.2023.09.160>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Assessment of higher harmonics influence to PMU measurement accuracy

Löper, Mari; Salumäe, Uku; Kilter, Jako 2017 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe) : Torino, Italy 26-29 September 2017 : Conference Proceedings 2017 / 6 p. : ill <https://doi.org/10.1109/ISGTEurope.2017.8260271>

Assessment of synchronous generator's influence on transmission network with significant level of voltage unbalance

Sarnet, Tanel; Kilter, Jako Elektronika ir elektrotehnika = Electronics and electrical engineering 2012 / p. 11-14 : ill
<https://eejournal.ktu.lt/index.php/elt/article/view/2796>

Assessment of transmission network voltage unbalance in connection of high-speed electrical railway connection

Kilter, Jako; Sarnet, Tanel; Kangro, Triin PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 329-334 : ill

Assessment of voltage instrument transformers accuracy for harmonic measurements in transmission systems [Online resource]

Stiegler, Robert; Meyer, Jan; **Kilter, Jako;** Konzelmann, Simon Proceedings of 2016 17th International Conference on Harmonics and Quality of Power (ICHQP) : Belo Horizonte, Minas Gerais, Brazil, 16-19 October 2016 2016 / p. 152-157 : ill
<https://doi.org/10.1109/ICHQP.2016.7783472>

Avalike elektrivõrkude pinge tunnussuurused = Voltage characteristics of electricity supplied by public electricity networks

2011 https://www.ester.ee/record=b2743062*est

Avalike elektrivõrkude pinge tunnussuurused = Voltage characteristics of electricity supplied by public electricity networks [Võrguteavik]

2015 http://www.ester.ee/record=b4512339*est

Avalike elektrivõrkude pinge tunnussuurused [Võrguteavik] = Voltage characteristics of electricity supplied by public electricity networks

2019 https://www.ester.ee/record=b5273602*est

Avalike elektrivõrkude pinge tunnussuurused [Võrguteavik] = Voltage characteristics of electricity supplied by public electricity networks

2019 https://www.ester.ee/record=b5273643*est

Avalike elektrivõrkude pinge tunnussuurused [Võrguteavik] = Voltage characteristics of electricity supplied by public electricity networks

2019

Balti LFC plokki vajalike sageduse hoidmise ja taastamise reservide dimensioneerimine suurenenud taastuvenergiaallikate lisandumise korral

Leinakse, Madis; Kilter, Jako 2023

Bare overhead conductor thermal rating calculation on the example of Estonian OHL

Šlenduhoov, Vadim; Kilter, Jako 14th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. II" : Pärnu, Estonia, January 13-18, 2014 2014 / p. 210-213 : ill

Benchmarking of power quality performance in transmission systems - CIGRE WG C4.27 perspective [Online resource]

Kilter, Jako; Vujatovic, Davor; Elphick, Sean Proceedings of 2016 17th International Conference on Harmonics and Quality of Power (ICHQP) : Belo Horizonte, Minas Gerais, Brazil, 16-19 October 2016 2016 / p. 949-954 <https://doi.org/10.1109/ICHQP.2016.7783342>

Capacitor coupled voltage transformer defect identification in the presence of tap changer

Asefi, Sajjad; Leinakse, Madis; Kilter, Jako; Landsberg, Mart IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2023) : proceedings 2023 / 5 p <https://doi.org/10.1109/isgteurope56780.2023.10408138>

Capacitor coupled voltage transformer inaccuracy effect on circuit breaker operation

Asefi, Sajjad; Andreesen, Guido; Kilter, Jako; Landsberg, Mart 2023 23rd International Scientific Conference on Electric Power Engineering (EPE) 2023 / 5 p <https://doi.org/10.1109/EPE58302.2023.10149279>

Case studies for power quality monitoring in public distribution grids – some results of working group CIGRE/CIRED C4.112

Meyer, Jan; **Kilter, Jako** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 85-92 : ill

CIGRE/CIRED guidelines for power quality monitoring – measurement locations, processing and presentation of data

Milanovic, Jovica V.; **Kilter, Jako**; Bollen, M. H. J.; Meyer, Jan Electra 2014 / p. 39-47

Class topper optimization approach to solve non-convex combined heat and power economic dispatch problems in power systems

Gupta, Pradeep Kumar; Tuttelberg, Kaur; Kilter, Jako 2024 IEEE International Conference on Power and Energy (PECon) 2024 / p. 179-184 <https://doi.org/10.1109/PECon62060.2024.10827527>

Clustering of Transmission System Loads Based on Monthly Load Class Energy Consumptions

Leinakse, Madis; Kilter, Jako 2020 21st International Scientific Conference on Electric Power Engineering (EPE), October 19-21, 2020, Prague, Czech Republic 2020 / 6 p. : ill <https://doi.org/10.1109/EPE51172.2020.9269197>

Comparative analysis of HVAC cable metallic sheath modelling approaches for network studies

Kangro, Triin; Kilter, Jako; De Silva, Jeewantha 2018 18th International Conference on Harmonics and Quality of Power (ICHQP 2018) : Ljubljana, Slovenia, 13 – 16 May 2018 2018 / 6 p. : ill <https://doi.org/10.1109/ICHQP.2018.8378924>

Comparison of system identification methods applied to analysis of inter-area modes [Online resource]

Tuttelberg, Kaur; Kilter, Jako; Uhlen, Kjetil Proceedings of IPST 2017 2017 / art. 17IPST121, p. 1-6 : ill http://www.ipstconf.org/Proc_IPST2017.php

Compliance assessment of a phasor measurement unit to IEC 61000-4-30 class a for power quality measurements in transmission systems

Löper, Mari; Kilter, Jako; Stiegler, Robert; Meyer, Jan 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärdla, Estonia, June 12-15, 2019 : proceedings 2019 / 6 p <https://doi.org/10.1109/PQ.2019.8818272>

Contemporary and future aspects of cost effective power quality monitoring - position paper of CIGRE WG C4.112

Meyer, Jan; **Kilter, Jako** PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 83-88 : ill <https://ieeexplore.ieee.org/abstract/document/6256208/similar#similar>

Continuous monitoring of power system inertia and transmission loss components using synchronized phasor measurements = Elektrisüsteemi inertsi ja ülekandekadude komponentide pidev jälgimine faasimõõtmiste abil

Tuttelberg, Kaur 2018 <https://digi.lib.ttu.ee/i/210732> https://www.ester.ee/record=b5151804*est

Conversion error of exponential to second order polynomial ZIP load model conversion

Leinakse, Madis; Kilter, Jako 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), 12-15 June 2018 : conference proceedings 2018 / p. 1-5 <https://doi.org/10.1109/EEEIC.2018.8493667>

Conversion error of second order polynomial ZIP to exponential load model conversion

Leinakse, Madis; Kilter, Jako Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MEDPOWER 2018) : Dubrovnik, Croatia, 12-15 November 2018 2018 / 5 p <https://doi.org/10.1049/cp.2018.1882>

Correcting systematic errors in corona losses measured with phasor measurement units

Tuttelberg, Kaur; Löper, Mari; Kilter, Jako IEEE transactions on power delivery 2019 / p. 2275-2277 : ill <https://doi.org/10.1109/TPWRD.2019.2917610> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cost-effective optimization of load shifting in the industry by using intermediate storages

Uuemaa, Priit; Kilter, Jako; Valtin, Juhan; Drovtar, Imre; Rosin, Argo; Puusepp, Andres Conference proceedings of IEEE ISGT Europe 2013 : 4th IEEE/PES Innovative Smart Grid Technologies Europe 2013 / [5] p

Cost-efficient improvement of power system's reliability within limited funds

Andreesen, Guido; Leinakse, Madis; Kilter, Jako; Landsberg, Mart 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 7 p <https://doi.org/10.1109/RTUCON62997.2024.10830808>

Critical PQ phenomena and sources of PQ disturbances in PE rich power systems : Deliverable 5.1 [Online resource]

Kilter, Jako; Löper, Mari; Kangro, Triin; Palu, Ivo 2016 [Deliverable 5.1](#)

Current practice and future challenges for power quality monitoring – CIGRE WG C4.112 perspective

Kilter, Jako 2012 IEEE 15th International Conference on Harmonics and Quality of Power : proceedings of ICHQP2012 : Kowloon

Current practice on power quality legislation within European transmission systems – results from Horizon 2020 project MIGRATE

Kilter, Jako; Trummal, Tarmo; Löper, Mari; Palu, Ivo 2020 19th International Conference on Harmonics and Quality of Power (ICHQP), 6-7 July 2020, Dubai, UAE 2020 <https://doi.org/10.1109/ICHQP46026.2020.9177907>

Data-driven asset management and condition assessment methodology for transmission overhead lines = Ülekandevõrgu õhuliinide andmepõhine varahalduse ja seisundi hindamise metoodika

Manninen, Henri 2022 <https://doi.org/10.23658/taltech.4/2022> <https://digikogu.taltech.ee/et/Item/b0c60eaf-b740-4df5-bead-0dd793d5e6c8> https://www.ester.ee/record=b5491207*est

Data-driven quantification and aggregation of demand-side flexibility for symmetrical bidding in energy balancing markets

Shahid, Arqum; Ahmadiyahangar, Roya; Kilter, Jako; Rosin, Argo Electric Power Systems Research 2025 / art. 111823 <https://doi.org/10.1016/j.epr.2025.111823>

Demand side management in small power systems - the Estonian case study

Drovtar, Imre; Rosin, Argo; Kilter, Jako Elektronika ir elektrotehnika = Electronics and electrical engineering 2016 / p. 13-19 : ill <https://doi.org/10.5755/j01.eie.22.3.15308> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Demand side management possibilities and viability for voltage support services in Estonia = Tarbimise juhtimise võimaluste uurimine ning rakendatavus pinge reguleerimise teenusteks Eestis

Drovtar, Imre 2016 <http://digi.lib.ttu.ee/i/?6032> https://www.ester.ee/record=b4601226*est

Demand side management potential in Estonia - a case study for the wood industry

Drovtar, Imre; Rosin, Argo; Kilter, Jako 14th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. II" : Pärnu, Estonia, January 13-18, 2014 2014 / p. 94-97 : ill

Demonstration of mitigation measures and clarification of unclear grid code requirements : Deliverable D1.6 [Online resource]

Rüberg, S.; Sewdien, V.; Rueda Torres, J. L.; **Kilter, Jako** 2019 [Deliverable D1.6](#)

Design of high-frequency transient current sensor for powerline on-line measurement

Kütt, Lauri; Järvi, Jaan; Kilter, Jako; Shafiq, Muhammad; Lehtonen, Matti Electrical and control technologies : proceedings of the 7th international conference on electrical and control technologies ECT-2012 2012 / p. 212-216 : ill <https://research.aalto.fi/fi/publications/design-of-high-frequency-transient-current-sensor-for-powerline-o>

Determining cost-efficient sequence of condition inspection based on estimated condition data

Andreesen, Guido; Leinakse, Madis; Kilter, Jako; Landsberg, Mart IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863436>

Development of a Substation Risk-Based Asset Management Decision-Making Process in the Case of Insufficient Information = Alajaama riskipõhise varahalduse otsustusprotsessi arendamine ebapiisava sisendteabe tingimustes

Andreesen, Guido 2025 https://www.ester.ee/record=b5754736*est <https://digikogu.taltech.ee/et/Item/49e349b9-c62b-4a9e-af14-5c8408e54028> <https://doi.org/10.23658/taltech.52/2025>

Development of realtime co-simulation platform harnessing consumer energy flexibility through an aggregator to provide grid support

Shabbir, Noman; Ahmadiyahangar, R; Rosin, Argo; Kilter, Jako; Martins, Joao IEEE Transactions on Consumer Electronics 2024 / p. 6641-6652 <https://doi.org/10.1109/TCE.2024.3470241> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Distribution network state monitoring

Meldorf, Mati; Treufeldt, Ülo; Kilter, Jako Scientific proceedings of Riga Technical University. Serija 4, Power and electrical engineering 2005 / p. 80-85 : ill

Dynamic Time Warping Technique for Condition Monitoring of High Voltage Circuit Breakers

Asefi, Sajjad; Kilter, Jako 2025 15th International Conference on Power, Energy, and Electrical Engineering (CPEEE) 2025 / p. 38-42 <https://doi.org/10.1109/CPEEE64598.2025.10987408>

Economic impact of renewable electricity generation on the Baltic region's electricity market

Drovtar, Imre; Landsberg, Mart; Kilter, Jako; Rosin, Argo Przegląd elektrotechniczny = Electrical review 2012 / p. 161-165 : ill https://www.academia.edu/80501050/Economic_impact_of_renewable_electricity_generation_on_the_Baltic_regions_electricity_market

Eesti elektrisüsteemi laiseiresüsteemi arendamine ja analüüs (WAMPAC) : uurimustöö 1.1-4/13/232 / Lep13118 I etapi

aruanne [Võrguväljaanne]

Palu, Ivo; Valdma, Mati; Meldorf, Mati; Keel, Matti; Šuvalova, Jelena; Šlenduhhov, Vadim; Kangro, Triin; Vaino, Sander; Sarnet, Tanel; Kilter, Jako; Ülavere, Eero; Reinson, Andrus 2014

Eesti elektrisüsteemi laiseiresüsteemi arendamine ja analüüs (WAMPAC) : uurimustöö 1.1-4/13/232 / Lep13118 II etapi aruanne [Võrguväljaanne]

Palu, Ivo; Meldorf, Mati; Šuvalova, Jelena; Liiv, Innar; Tuttelberg, Kaur; Kangro, Triin; Astapov, Victor; Sarnet, Tanel; Šlenduhhov, Vadim; Kilter, Jako; Ülavere, Eero; Reinson, Andrus 2014

Eesti elektrisüsteemi ülekandevõrgu koormuste staatilised ja dünaamilised karakteristikud : uurimistöö 1.1-4/2015/227 / Lep 15066 I etapi lõpparuanne [Võrguteavik]

Treufeldt, Ülo; Leinakse, Madis; Salumäe, Uku; Sarnet, Tanel; Meldorf, Mati; Kilter, Jako; Reinson, Andrus; Drovтар, Imre 2015
http://elering.ee/public/Infokeskus/Uuringud/Koormuste_karakteristikud.pdf

Eesti elektrisüsteemi ülekandevõrgu koormuste staatilised ja dünaamilised karakteristikud : uurimistöö 1.1-4/2015/227/ Lep 15066 lõpparuanne [Võrguteavik]

Treufeldt, Ülo; Meldorf, Mati; Leinakse, Madis; Sarnet, Tanel; Salumäe, Uku; Kilter, Jako; Krusell, Kaur; Reinson, Andrus; Matjas, Ilja 2017 [Eesti elektrisüsteemi ülekandevõrgu koormuste staatilised ja dünaamilised karakteristikud](#)

Eesti elektrisüsteemi ülekandevõrgu koormuste staatilised ja dünaamilised karakteristikud : uurimistöö 1.1-4/2015/227/ Lep 15066 II etapi lõpparuanne [Võrguteavik]

Treufeldt, Ülo; Meldorf, Mati; Leinakse, Madis; Sarnet, Tanel; Salumäe, Uku; Kilter, Jako; Krusell, Kaur; Reinson, Andrus; Matjas, Ilja 2016
<https://elering.ee/sites/default/files/attachments/Eesti%20elektris%20%C3%BCsteemi%20%C3%BClekandev%20%C3%B5rgu%20koormuste%20staatilis%20ja%20d%C3%BCnaamilised%20karakteristikud%202.etapp%202016.pdf>

Electrical network load monitoring on special days

Meldorf, Mati; Treufeldt, Ülo; Kilter, Jako Scientific proceedings of Riga Technical University. Serija 4, Power and electrical engineering 2006 / p. 19-23 : ill

Electricity consumption analysis and power quality monitoring in commercial buildings

Drovтар, Imre; Niitsoo, Jaan; Rosin, Argo; Kilter, Jako; Palu, Ivo PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 107-112 : ill
<https://ieeexplore.ieee.org/document/6256212>

Elektriraudtee ja selle mõjud elektrisüsteemi talitlusele

Kilter, Jako; Kangro, Triin; Sarnet, Tanel; Palu, Ivo 2015 https://www.ester.ee/record=b4495599*est

Elektrisüsteemi stabiilsus

Meldorf, Mati; Kilter, Jako 2011 http://www.ester.ee/record=b2753320*est

Elektrituulikud. Osa 21, Elektrivõrguga ühendatud elektrituulikute elektri kvaliteedi näitajate mõõtmine ja hindamine = Wind turbines. Part 21, Measurement and assessment of power quality characteristics of grid connected wind turbines (IEC 61400-21:2008)

2010 https://www.ester.ee/record=b4274376*est

Elektrivõrgu operatiivjuhtimissüsteem

Meldorf, Mati; Tikk, Tõnis; Kilter, Jako 2010 http://www.ester.ee/record=b2668039*est

Elektriõhuliinid vahelduvpingega üle 1 kV. Osa 2-20, Eesti riiklikud erinõuded (SEN) [Võrguteavik] = Overhead electrical lines exceeding AC 1 kV. Part 2-20, National Normative Aspects (NNA) for Estonia (based on EN 50341-1:2012)

2018 https://www.ester.ee/record=b5186383*est

Enefit oil factory (Enefit 280 and Enefit 280-2) plant controller algorithm

Sarnet, Tanel; Kilter, Jako 2022

Energeetikud: Eestis on suure elektrikatkestuse tekkimine vähetõenäoline

err.ee 2025 <https://www.err.ee/1609678931/energeetikud-eestis-on-suure-elektrikatkestuse-tekkimine-vahetoenaoiline>

Energy experts: Major power outage unlikely in Estonia

err.ee 2025 <https://news.err.ee/1609679186/energy-experts-major-power-outage-unlikely-in-estonia>

Energy storage facilities impact on flexibility of active distribution networks: stochastic approach

Alipour, Manijeh; Gharehpetian, Gevork B.; **Ahmadihangar, Roya; Rosin, Argo; Kilter, Jako** Electric power systems research 2022 / art. 108645 <https://doi.org/10.1016/j.epr.2022.108645> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estimation and conversion of static load models of aggregated transmission system loads = Ülekandevõrgu sõlmekoormuste staatiliste koormusmodelite määramine ja teisendamine

Leinakse, Madis 2022 <https://doi.org/10.23658/taltech.3/2022> <https://digikogu.taltech.ee/et/Item/f179e30b-3265-4cc4-94d5-29750f3e9bfb>
https://www.ester.ee/record=b5491230*est

Estimation of distribution network state on the basis of a mathematical load model

Meldorff, Mati; Treufeldt, Ülo; Kilter, Jako Oil shale 2005 / 2S, p. 161-170 https://artiklid.elnet.ee/record=b2346713*est

Estimation of exponential and ZIP load model of aggregated load with distributed generation

Leinakse, Madis; Andreesen, Guido; Tani, Pärtel; Kilter, Jako 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2021 / p. 1-6 <https://doi.org/10.1109/RTUCON53541.2021.9711702>

Estimation of power system inertia from ambient wide area measurements

Tuttelberg, Kaur; Kilter, Jako; Wilson, Douglas; Uhlen, Kjetil IEEE transactions on power systems 2018 / p. 7249-7257
<https://doi.org/10.1109/TPWRS.2018.2843381> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estimation of power system inertia from ambient wide area measurements

Tuttelberg, Kaur; Kilter, Jako; Wilson, Douglas; Uhlen, Kjetil 2019 IEEE Power & Energy Society General Meeting (PESGM) 2019 / 1 p <https://doi.org/10.1109/PESGM40551.2019.8973822>

Estimation of transmission loss components from phasor measurements

Tuttelberg, Kaur; Kilter, Jako International journal of electrical power & energy systems 2018 / p. 62-71 : ill
<https://doi.org/10.1016/j.ijepes.2017.11.040> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

EstLink 1 ja EstLink 2 : sarnased või sootuks erinevad elektriühendused Soomega?

Haug, Reigo; Kilter, Jako Inseneeria 2014 / lk. 34-35 https://artiklid.elnet.ee/record=b2664996*est

Estonian WAMS system - implementation and experiences

Kilter, Jako; Goloshchapov, A.; Mahkovec, B. 3rd International Scientific and Technical Conference - Actual Trends in Development of Power System Protection and Automation : St. Petersburg, 30.05-03.06.2011 : conference proceedings 2011

EU regulation establishing a network code on requirements for grid connection of generators

Pfeiffer, R.; Haesen, E.; Kilter, Jako 14th Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants : 20-22 October 2015, Brussels, Belgium : proceedings 2015

Euroopa kobab pimeduses: miks kadus Lõuna-Euroopas ootamatult elekter?

Kivi, Krister postimees.ee 2025 <https://majandus.postimees.ee/8241615/luubi-all-euroopa-kobab-pimeduses-miks-kadus-louna-euroopas-ootamatult-elekter>

Euroopa standardi EN 50160 rakendusjuhend = Guide for the application of the European Standard EN 50160

[Võrguteavik]

2014

Experiences with dynamic PMU compliance testing using standard relay testing equipment [Electronic resource]

Kilter, Jako; Palu, Ivo; Almas, Muhammad Shoaib; Vanfretti, Luigi 2015 IEEE Power and Energy Society Innovative Smart Grid Technologies Conference (ISGT 2015) : 18-20 February 2015, Washington, DC, USA 2015 / [5] p. : ill. [USB]
<http://dx.doi.org/10.1109/ISGT.2015.7131833>

Experiences with steady-state PMU compliance testing using standard relay testing equipment

Almas, Muhammad Shoaib; Kilter, Jako; Vanfretti, Luigi PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 103-110 : ill

Exponential to ZIP and ZIP to exponential load model conversion : methods and error

Leinakse, Madis; Kilter, Jako IET generation, transmission & distribution 2021 / p. 177-193 <https://doi.org/10.1049/gtd2.12002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fault simulation and analysis of high-voltage circuit breaker's spring charging mechanism using a universal motor model

Asad, Bilal; Vaimann, Toomas; Kallaste, Ants; Kilter, Jako; Sardar, Muhammad Usman 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 5 p
<https://doi.org/10.1109/RTUCON62997.2024.10830846>

First results on load model estimation using digital fault recorder measurements

Leinakse, Madis; Sarnet, Tanel; Kangro, Triin; Kilter, Jako 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology III" : Pärnu, Estonia, January 16-21, 2017 2017 / p. 101-105 : ill http://www.ester.ee/record=b4650094*est

Forecasting Corona Losses on High Voltage Transmission Lines Using Machine Learning

Gupta, Pradeep Kumar; Tuttlberg, Kaur; Kilter, Jako IEEE transactions on power delivery 2025 / p. 2696-2705
<https://doi.org/10.1109/TPWRD.2025.3593923>

Future power system out-of-step protection concept utilizing synchronized phasor measurements = Tuleviku elektrisüsteemi faasimõõtmistel põhinev sünkronismikaotuskaitse kontseptsioon

Tealane, Marko 2023 <https://doi.org/10.23658/taltech.9/2023> <https://digikogu.taltech.ee/et/Item/159731eb-e93e-4892-875f-3806cd16e64c>
https://www.ester.ee/record=b5542953*est

Future system challenges in Europe. Contributions to solutions from connection network codes

Urdal, Helge; Martinez Villanueva, Sergio; Kilter, Jako; Jahn, Jörg; Sprooten, Jonathan; Baranauskas, Audrius 2016 CIGRE USNC International Colloquium on Evolution of Power System Planning to Support Connection of Generation, Distributed Resources and Alternative Technologies : 02-03 November 2016, Philadelphia, USA : proceedings 2016 / p. 1-8 : ill

A Gramian-based tool for modeling converter-dominated power systems

de Morais Dias Campos, Nathalia; Sarnet, Tanel; Kilter, Jako IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863396>

Guidelines for power quality monitoring – results from CIGRE/CIREN JWG C4.112

Kilter, Jako; Elphick, Sean; Meyer, Jan; Milanovic, Jovica V. Proceedings of 2014 16th International Conference on Harmonics and Quality of Power (ICHQP) : University POLITEHNICA of Bucharest, Bucharest, Romania, 25-28 May 2014 2014 / p. 703-707 : tab

Guidelines for power quality monitoring : measurement locations, processing and presentation of data

Milanovic, Jovica V.; Kilter, Jako 2014

Harku Estlink 1 ja Kiisa AREJ-de koostöö uuring

Kilter, Jako; Sarnet, Tanel 2023

Harmonic emissions of power electronic devices under different transmission network operating conditions

Božicek, Ambrož; Kilter, Jako; Sarnet, Tanel; Papic, Igor; Blažis, Boštjan IEEE transactions on industry applications 2018 / p. 5216-5226 : ill <https://doi.org/10.1109/TIA.2018.2808478> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Harmonic levels of domestic and electrical vehicle loads in residential distribution networks

Niitsoo, Jaan; Kilter, Jako; Palu, Ivo; Taklaja, Paul; Kütt, Lauri Proceedings of IEEE AFRICON 2013 Conference : 9-12 September 2013, Mauritius 2013 / p. 184-188 <https://doi.org/10.1109/AFRICON.2013.6757800> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Health index prediction of overhead transmission lines : a machine learning approach

Manninen, Henri; Kilter, Jako; Landsberg, Mart IEEE transactions on power delivery 2022 / p. 50-58
<https://doi.org/10.1109/TPWRD.2021.3052721> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High voltage circuit breaker charging motor's condition monitoring - importance, possibilities, and challenges

Asad, Bilal; Sardar, Muhammad Usman; Vaimann, Toomas; Kallaste, Ants; Asefi, Sajjad; Kilter, Jako 2024 International Conference on Diagnostics in Electrical Engineering (Diagnostika) 2024 / 7 p <https://doi.org/10.1109/Diagnostika61830.2024.10693906>

High voltage circuit breaker health index Evaluation considering measurement accuracy

Asefi, Sajjad; Kilter, Jako; Shayesteh, Ebrahim; Hilber, Patrik; Lindquist, Tommie IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863019>

High-frequency current sensor for power network on-line measurements

Kütt, Lauri; Järvik, Jaan; Vaimann, Toomas; Shafiq, Muhammad; Lehtonen, Matti; Kilter, Jako Proceedings of the 13th International Scientific Conference Electric Power Engineering 2012 : EPE 2012 : Brno. Vol. 1 2012 / p. 367-371 : ill
https://www.researchgate.net/publication/262674502_High-Frequency_Current_Sensor_for_Power_Network_On-line_Measurements

A holistic D-PMU optimal placement framework considering pragmatic constraints in smart grids

Farhizadan, Mohammadreza; Karrari, Mehdi; Gharehpetian, Gevorg B.; Ahmadihangar, Roya; Kilter, Jako; Rosin, Argo IEEE 16th International Conference on Compatibility, Power Electronics, and Power Engineering (CPE-POWERENG) 2022 / 7 p.
<https://doi.org/10.1109/CPE-POWERENG54966.2022.9880881>

A holistic risk-based maintenance methodology for transmission overhead lines using tower specific health indices and value of loss load

Manninen, Henri; Kilter, Jako; Landsberg, Mart International journal of electrical power and energy systems 2022 / art. 107767 ; 11 p. : ill <https://doi.org/10.1016/j.ijepes.2021.107767> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

HVDC connection of offshore wind power plants

Elahi, H.; Kilter, Jako; Ebner, G. 2015

Identification of intra-day variations of static load characteristics based on measurements in high-voltage transmission network

Leinakse, Madis; Kiristaja, Hendrik; Kilter, Jako 2018 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe), Sarajevo, Bosnia and Herzegovina, October 21-25, 2018 : proceedings 2018 / 6 p
<https://doi.org/10.1109/ISGTEurope.2018.8571712>

Impact of distributed generation on estimation of exponential load models

Leinakse, Madis; Tani, Pärtel; Kilter, Jako 2019 IEEE Power & Energy Society General Meeting (PESGM) 2019 / 5 p. : ill
<https://doi.org/10.1109/PESGM40551.2019.8974014>

Impact of voltage instrument transformers on the accuracy of harmonic measurements in a 330 kV transmission grid

Meyer, Jan; Stiegler, Robert; Schegner, Peter; **Kilter, Jako** Instrument Transformer Measurement Forum (ITMF) : October 13-15, 2015, Feldkirch, Austria 2015

Impacts of large scale wind integration on the Baltic region's thermal power plant economics and electricity market in 2025 [Electronic resource]

Drovtar, Imre; Landsberg, Mart; Kilter, Jako; Rosin, Argo SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 684-689 : ill [CD-ROM]
https://www.researchgate.net/publication/261155311_Impacts_of_large_scale_wind_integration_on_the_baltic_region's_thermal_power_plant_economics_and_electricity_market_in_2025

Incorporating service type in aging failure model of high voltage circuit breaker

Asefi, Sajjad; Kilter, Jako; Landsberg, Mart 2023 27th International Conference Electronics : proceedings 2023 / 5 p
<https://doi.org/10.1109/IEEECONF58372.2023.10177602>

Industrial CHP optimal management in the energy market under incomplete information

Uuemaa, Priit; Drovtar, Imre; Kilter, Jako 2014 IEEE Innovative Smart Grid Technologies Conference - Asia (ISGT ASIA) Conference : May 20-23, 2014, Berjaya Times Square Hotel, Kuala Lumpur 2014 / p. 383-387 : ill

Influence of electric railway system on voltage unbalance distribution between high voltage and low voltage electrical networks

Sarnet, Tanel; Kilter, Jako; Palu, Ivo Electrical and control technologies : proceedings of the 8th International Conference on Electrical and Control Technologies ECT-2013 : Kaunas, Lithuania, 2-3 May 2013 2013 / p. 168-171
https://www.researchgate.net/publication/290247556_Influence_of_electric_railway_system_on_voltage_unbalance_distribution_between_high_voltage_and_low_voltage_electrical_networks

Influence of system protection to Estonian power system security

Kilter, Jako; Reinson, Andrus; Kraav, Rein PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia 2010 / p. 23-28 : ill

Info-gap-based optimization of microgrids integrated with power, cooling and hydrogen generation units

Mahmoudnezhad, Fayeze; Mirzaei, Mohammad Amin; Plaum, Freddy; Ahmadiyahangar, Roya; Kilter, Jako; Rosin, Argo 2022 IEEE 16th International Conference on Compatibility, Power Electronics, and Power Engineering (CPE-POWERENG) 2022 / 7 I
<https://doi.org/10.1109/CPE-POWERENG54966.2022.9880860>

Integrating Attention-Based LSTM with XGBoost for Improved Residential DC Load Forecasting

Shabbir, Noman; Shahid, Arqum; Daniel, Kamran; Rosin, Argo; Kilter, Jako; Martins, Joao 2025 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2025

Integration of Wide Area Monitoring technology and enhancement of power system reliability in Baltic power system

Kilter, Jako; Reinson, Andrus 6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings 2008 / p. 41-46 : map

Jaotusvõrgud

Meldorf, Mati; Tammoja, Heiki; Treufeldt, Ülo; Kilter, Jako 2007 https://www.ester.ee/record=b2347094*est

Keskmised jõutrafod sagedusele 50 Hz seadme suurima lubatava kestevpingega mitte üle 36 kV. Osa 1, Üldnõuded [Võrguteavik] = Medium power transformers 50 Hz, with highest voltage for equipment not exceeding 36 kV. Part 1, General requirements

2017 http://www.ester.ee/record=b4767645*est

Kõrgepingeline lülitis- ja juhtimisaparatuur. Osa 1, Vahelduvvoolu lülitis- ja juhtimisaparatuuri üldliigitus [Võrguteavik] = High-voltage switchgear and controlgear. Part 1, Common specifications for alternating current switchgear and controlgear (IEC 62271-1:2017)

2017 http://www.ester.ee/record=b4768187*est

Large scale electric vehicle integration and its impact on the Estonian power system

Drovtar, Imre; Rosin, Argo; Landsberg, Mart; Kilter, Jako IEEE PowerTech 2013, Grenoble, France, 16-20 June 2013 :

proceedings 2013 / [6] p

https://www.researchgate.net/publication/261398872_Large_scale_electric_vehicle_integration_and_its_impact_on_the_Estonian_power_system

Large-scale wind integration impact on the Baltic region's electricity market participants in 2025 - with and without RES subsidies

Drovtar, Imre; Landsberg, Mart; Kilter, Jako; Rosin, Argo 11th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 16-21, 2012 2012 / p. 117-121 : ill

Load control implementation in the energy intensive industry

Uuemaa, Priit; Valtin, Juhan; Kilter, Jako; Puusepp, Allan; Drovtar, Imre; Rosin, Argo 17th IEEE Mediterranean Electrotechnical Conference, Beirut, Lebanon, 13-16 April 2014 2014 / p. 213-218 : ill <https://doi.org/10.1109/MELCON.2014.6820534> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Madalpingevõrkudes kasutatavate seadmete isolatsiooni koordineerimine. Osa 3, Ühe- ja kahepoolsete pinnakatete ning kompaundivormide kasutamine saastekaitseks = Insulation coordination for equipment within low-voltage systems. Part 3, Use of coating, potting or moulding for protection against pollution (IEC 60664-3:2003/A1:2010)

2011 https://www.ester.ee/record=b2743110*est

Magnetic current sensor stray components in high frequency operation and their effects

Kütt, Lauri; Järvik, Jaan; Mölder, Heigo; Kilter, Jako; Shafiq, Muhammad Conference proceedings : 2012 11th International Conference on Environment and Electrical Engineering : Venice, Italy, 18-25 May 2012 2012 / p. 617-620 : ill <https://ieeexplore.ieee.org/abstract/document/6221451>

Maximum risk calculation process for individual substation equipment in primary side

Andreesen, Guido; Leinakse, Madis; Kilter, Jako; Landsberg, Mart IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863055>

Measurement and operation based condition monitoring methodology for high voltage circuit breakers

Asefi, Sajjad; Andreesen, Guido; Leinakse, Madis; Kilter, Jako; Kalmet, Tauri; Manninen, Henri; Landsberg, Mart 2022 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe) : proceedings 2022 / Art. 184786 <https://doi.org/10.1109/ISGT-Europe54678.2022.9960521>

Methodology for forecasting the cost of substation asset management in upcoming future

Andreesen, Guido; Leinakse, Madis; Kilter, Jako; Landsberg, Mart 2024 IEEE International Conference on Power and Energy (PECon) 2024 / p. 185-190 <https://doi.org/10.1109/PECon62060.2024.10826804>

MIGRATE - research enabling 100% renewable generation in future power systems

Löper, Mari; Kangro, Triin; Tuttelberg, Kaur; Tealane, Marko; Kilter, Jako 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 175-181 : ill http://ise.elnet.ee/record=b2950104~S2*est

Modal transformation matrices for phasor measurement based line parameter estimations

Tuttelberg, Kaur; Kilter, Jako International Conference on Power Systems Transients (IPST 2015) : 15th-18th of June 2015, Cavtat, Croatia 2015 / [6] p. : ill

Model verification for analysis of wind power impact to transient stability in isolated power system using combined relay protection and dynamics modelling approach

Maripuu, Rain; Tsernobrovkin, Oleg; Palu, Ivo; Kilter, Jako PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 169-174 : ill <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=6256222>

Modeling and analysis of the synchronous generators excitation systems

Slenduhhov, Vadim; Kilter, Jako 13th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 14-19, 2013 2013 / p. 252-257 : ill

Modeling and analysis of voltage unbalance and its influence on transmission network and power quality

Sarnet, Tanel; Kilter, Jako Electrical and Control Technologies : proceedings of the 7th International Conference on Electrical and Control Technologies ECT-2012 2012 / p. 179-182 : ill

Modelling and estimation of distribution network operation

Kilter, Jako; Meldorf, Mati Scientific proceedings of Riga Technical University. Serija 4, Power and electrical engineering 2007 / p. 103-108 : ill

Modelling of distribution level coreless induction furnace for rapid voltage change assessment

Trummal, Tarmo; Sarnet, Tanel; Kilter, Jako Electric power systems research 2021 / art. 107151

<https://doi.org/10.1016/j.epsr.2021.107151> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modelling of high-speed electrical railway system for transmission network voltage quality analysis : Rail Baltic case study

Kilter, Jako; Sarnet, Tanel; Kangro, Triin PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 323-328 : ill

Monitoring of electrical distribution network operation = Jaotusvõrgu talitluse seire

Kilter, Jako 2009 https://www.ester.ee/record=b2498170*est

Monitoring of the distribution network operation

Kilter, Jako; Meldorf, Mati Proceedings of 4th IASME/WSEAS International Conference on Energy & Environment (EE'09) : Cambridge, UK, February 24-26, 2009 2009 / p. 263-268

Multi-stage deep learning networks for automated assessment of electricity transmission infrastructure using fly-by images

Manninen, Henri; Ramlal, Craig J.; Singh, Arvind; Kilter, Jako; Landsberg, Mart Electric power systems research 2022 / art. 107948 <https://doi.org/10.1016/j.epsr.2022.107948> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mõõtetrafod. Osa 1, Voolutrafod = Instrument transformers. Part 1, Current transformers (IEC 60044-1:1996, modified)

2010 https://www.ester.ee/record=b2646205*est

Mõõtetrafod. Osa 3, Lisanõuded induktiivpingetrafodele = Instrument transformers. Part 3, Additional requirements for inductive voltage transformers (IEC 61869-3:2011)

2012 https://www.ester.ee/record=b2896163*est

Mõõtetrafod. Osa 4, Lisanõuded ühitatud trafodele [Võrguteavik] = Instrument transformers. Part 4, Additional requirements for combined transformers (IEC 61869-4:2013)

2015 http://www.ester.ee/record=b4502348*est

National implementation challenges and support by ENTSO-E for European connection network codes

Urdal, Helge; Haesen, E.; **Kilter, Jako** 14th Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants : 20-22 October 2015, Brussels, Belgium : proceedings 2015

National Implementation in Estonia of COMMISSION REGULATION (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators

Kilter, Jako 15th Wind Integration Workshop : International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants : 15-17 November 2016, Vienna, Austria 2016 / p. 1-6

Non-intrusive defects identification for the high voltage instrument transformers

Asefi, Sajjad; Kilter, Jako; Landsberg, Mart 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227493>

Novel gramian-based structure-preserving model order reduction for power systems with high penetration of power converters

de Morais Dias Campos, Nathalia; Sarnet, Tanel; Kilter, Jako IEEE transactions on power systems 2023 / p. 5381-5391 <https://doi.org/10.1109/TPWRS.2022.3228458> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nõuded jaotusvõrkudega paralleelselt ühendatud tootmisüksustele. Osa 2, Ühendus keskpingejaotusvõrguga.

Tootmisüksused kuni tüübini B (kaasa arvatud) [Võrguteavik] = Requirements for generating plants to be connected in parallel with distribution networks. Part 2, Connection to a MV distribution network. Generating plants up to and including Type B

2021 https://www.ester.ee/record=b5480840*est

Nõuded jaotusvõrkudega paralleelselt ühendatud tootmisüksustele. Osa 1, Ühendus madalpingejaotusvõrguga.

Tootmisüksused kuni tüübini B (kaasa arvatud) [Võrguteavik] = Requirements for generating plants to be connected in parallel with distribution networks. Part 1, Connection to a LV distribution network. Generating plants up to and including Type B

2021 https://www.ester.ee/record=b5428205*est

Online detection of out-of-step condition using PMU-determined system impedances

Tealane, Marko; Kilter, Jako; Popov, Marjan; Bagleybter, Oleg; Klaar, Danny IEEE Access 2022 / p. 14807-14818

<https://doi.org/10.1109/ACCESS.2022.3149103> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimal introduction of a nuclear power plant in Estonia under uncertain conditions

Landsberg, Mart; **Tammoja, Heiki; Kilter, Jako** 6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings 2008 / p. 211-216 : ill

Optimal placement of branch PMUs for specified redundancy and line observability

Tuttelberg, Kaur; Kilter, Jako 2015 IEEE Power & Energy Society General Meeting (PESGM 2015) : Denver, CO, USA, July 26-30, 2015 / [5] p. : ill <http://dx.doi.org/10.1109/PESGM.2015.7286453>

Optimal reactive power control in a multi-machine thermal power plant

Trummal, Tarmo; Andreesen, Guido; Kilter, Jako 2020 21st International Scientific Conference on Electric Power Engineering (EPE), October 19-21, 2020, Prague, Czech Republic 2020 <https://doi.org/10.1109/EPE51172.2020.9269239>

Out-of-step protection based on discrete angle derivatives

Tealane, Marko; Kilter, Jako; Bagleybter, Oleg; Heimisson, Birkir; Popov, Marjan IEEE Access 2022 / p. 78290-78305

<https://doi.org/10.1109/ACCESS.2022.3193390> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Phasor measurement units performance assessment during power system disturbances using real-time digital simulator

Trummal, Tarmo; Kilter, Jako; Löper, Mari; Palu, Ivo 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, Estonia, June 12-15, 2019 : proceedings 2019 / 8 p. : ill <https://doi.org/10.1109/PQ.2019.8818247>

Pingemuunduritega alalisvoolusüsteemide terminoloogia [Võrguteavik] = Terminology for voltage-sourced converters (VSC) for high-voltage direct current (HVDC) systems (IEC 62747:2014+IEC 62747:2014/A1:2019)

2020 https://www.ester.ee/record=b5352701*est

Possibilities and analysis of integration of large-scale offshore wind parks into Estonian power system

Kilter, Jako; Tšernobrovkin, Oleg; Landsberg, Mart; Agabus, Hannes; Palu, Ivo 8th International Workshop on Large Scale Integration of Wind Power and on Transmission Networks for Offshore Wind Farms : Bremen, Germany, 14-15 October, 2009 2009 / p. 624-629

Predicting frequency disturbances from wide area monitoring of ambient power system dynamics

Tuttelberg, Kaur; Kilter, Jako 2018 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe), Sarajevo, Bosnia and Herzegovina, October 21-25, 2018 : proceedings 2018 / 6 p <https://doi.org/10.1109/ISGTEurope.2018.8571711>

Preliminary study on comparative load modelling in PSS/E and PSCAD

Leinakse, Madis; Kapp, Henry; Kilter, Jako 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 197-199 : ill http://ise.elnet.ee/record=b2950110~S2*est

Presentation of the European project MIGRATE

Grasset, H.; Popov, M.; Zargar, B.; **Kilter, Jako** Eight Protection, Automation and Control (PAC) World Conference : Wroclaw, Poland, 27-29 June 2017 2017 / p. THA05, [6] p

Processing and filtering digital fault recorder events for load model estimation

Leinakse, Madis; Kilter, Jako 2021 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 8-21 October, 2021 : proceedings 2021 / 5 p <https://doi.org/10.1109/ISGTEurope52324.2021.9640026>

Purtse hybrid power plant common plant controller algorithm

Sarnet, Tanel; Kilter, Jako 2023

Purtse hybrid power plant connection studies and Grid Code compliance assessment

Kilter, Jako; Sarnet, Tanel 2023

Purtse hybrid power plant PSCAD and PSS/E models

Kilter, Jako; Sarnet, Tanel 2023

Puust ja punaseks: mida Venemaa sagedusalast lahkumine tähendab?

Piir, Rait novaator.err.ee 2025 [Puust ja punaseks: mida Venemaa sagedusalast lahkumine tähendab?](#)

Quantification of corona discharge intensity applied to sphere-plane configurations

Gupta, Pradeep Kumar; Ruiz, Jordi-Roger Riba; Tuttelberg, Kaur; Kilter, Jako IEEE Transactions on Dielectrics and Electrical Insulation 2025 <https://doi.org/10.1109/TDEI.2025.3562196>

Rahvusvaheline elektrotehnika sõnastik. Osa 321, Mõõtetrafod [Võrguteavik] = International Electrotechnical Vocabulary. Chapter 321, Instrument transformers (IEC 60050-321:1986)

2017 http://www.ester.ee/record=b4770371*est

Rahvusvaheline elektrotehnika sõnastik. Osa 421, Jõutrafod ja reaktorid [Vörguteavik] = International Electrotechnical Vocabulary. Chapter 421, Power transformers and reactors (IEC 60050-421:1990) / Eesti Standardikeskus

2017 http://www.ester.ee/record=b4751512*est

Rahvusvaheline elektrotehnika sõnastik. Osa 436, Jõukondensaatorid [Vörguteavik] = International Electrotechnical Vocabulary. Chapter 436, Power capacitors (IEC 60050-436:1990)

2017 http://www.ester.ee/record=b4770422*est

Rahvusvaheline elektrotehnika sõnastik. Osa 448, Elektrisüsteemi kaitse [Vörguteavik] = International Electrotechnical Vocabulary. Part 448, Power system protection (IEC 60050-448:1995)

2017 http://www.ester.ee/record=b4771190*est

Rahvusvaheline elektrotehnika sõnastik. Osa 614, Elektri tootmine, ülekandmine ja jaotamine. Käit [Vörguteavik] = International Electrotechnical Vocabulary (IEV). Chapter 614, Generation, transmission and distribution of electricity. Operation (IEC 60050-614:2016)

2017 http://www.ester.ee/record=b4751531*est

Ramping behaviour analysis of wind farms

Mishra, Sambeet; Leinakse, Madis; Palu, Ivo; Kilter, Jako 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), 12-15 June 2018 : conference proceedings 2018 / 5 p.: ill <https://doi.org/10.1109/EEEIC.2018.8493720>

Ratio of load curtailment based detection of the maximum risk of substation devices

Andreesen, Guido; Leinakse, Madis; Kilter, Jako; Landsberg, Mart IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2023) : proceedings 2023 / 5 p <https://doi.org/10.1109/ISGTEUROPE56780.2023.10408265>

Reaktiivenergia tarbimise analüüs Tallinna Tehnikaülikooli hoonetes [Elektroniline publikatsioon]

Kangro, Triin; Kilter, Jako; Palu, Ivo 2015

Real-time estimation of transmission losses from PMU measurements

Tuttelberg, Kaur; Kilter, Jako IEEE PowerTech 2015 : Eindhoven, Holland, 29 June-02 July, 2015 2015 / [5] p. : ill <http://dx.doi.org/10.1109/PTC.2015.7232313>

Real-time testing of out-of-step protection devices

Tealane, Marko; Kilter, Jako; Pill, Krister 2021 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 8-21 October, 2021 : proceedings 2021 / 5 p <https://doi.org/10.1109/ISGTEurope52324.2021.9640178>

Reinforcement learning for optimal renewable energy sources scheduling

Nejad, Hamid Mohammad; Asefi, Sajjad; Kilter, Jako IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863772>

Residential load harmonics in distribution grid

Niitsoo, Jaan; Palu, Ivo; Kilter, Jako; Taklaja, Paul; Vaimann, Toomas The 3rd International Conference on Electric Power and Energy Conversion Systems (EPECS 2013) : [proceedings] 2013 / p. 1-6 : ill

Review of high voltage instrument transformer condition monitoring

Asefi, Sajjad; Asad, Bilal; Leinakse, Madis; Manninen, Henri; Kilter, Jako; Vaimann, Toomas; Kallaste, Ants; Tealane, Marko; Landsberg, Mart IEEE Transactions on Dielectrics and Electrical Insulation 2024 / p. 3331-3341 <https://doi.org/10.1109/TDEI.2024.3422260> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sensitivity analysis of corona discharges measuring instruments using different electrodes and high voltage supplies

Gupta, Pradeep Kumar; Riba Ruiz, Jordi-Roger; Casals-Torrens, Pau; Talens i Garvin, Jordi; Tuttelberg, Kaur; Kilter, Jako IEEE Sensors Letters 2024 / art. 6015704 <https://doi.org/10.1109/LSSENS.2024.3504551>

Short-circuit wave transient measurements in HV power network

Kütt, Lauri; Kilter, Jako; Palu, Ivo 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 37-41 : ill

Short-term PV energy generation forecasting using deep learning

Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo; Astapov, Victor; Kilter, Jako Telematique 2022 <https://www.provinciajournal.com/index.php/telematique/article/view/813>

Simulation models for power-quality studies in power-electronics rich power networks : Deliverable 5.2 [Online resource]

Božiček, Ambrož; Blažič, Boštjan; Špelko, Aljaž; Sarnet, Tanel; Löper, Mari; Kilter, Jako 2017 [Deliverable 5.2](#)

Smooth coordination and management of impact of EstLink 2 transmission testing on electricity markets, power system operations and system technical performance

Rauhala, T.; Laasonen, M.; **Kilter, Jako** CIGRE Session 2016 : 21-26 August 2016, Paris, France 2016 / p. 1-11

Solutions and active measures for wind power integration

Rosin, Argo; Drovtar, Imre; Kilter, Jako Large scale grid integration of renewable energy sources 2017 / p. 87-129 : ill
<http://dx.doi.org/10.1049/PBPO098E>

Solutions and active measures for wind power integration

Rosin, Argo; Drovtar, Imre; Kilter, Jako Large Scale Grid Integration of Renewable Energy Sources : Solutions and technologies (2nd Ed.) 2024 / p. 91-138 <https://doi.org/10.1049/PBPO222E>

State estimation technique for distribution networks

Meldorf, Mati; Treufeldt, Ülo; Kilter, Jako PowerTech Conference proceedings : 27-30 June 2005, St.Petersburg 2005 / Paper 374, [5] p

Stochasticity of the electrical network load

Meldorf, Heiki; Täht, T.; Kilter, Jako Oil shale 2007 / 2S, p. 225-236 : ill <https://www.semanticscholar.org/paper/STOCHASTICITY-OF-THE-ELECTRICAL-NETWORK-LOAD-Meldorf-T%C3%A4ht/ba9fcafe43fd6d33cd09033fab4f277bd307785d>

Targale wind farm connection studies and Grid Code compliance assessment

Sarnet, Tanel; Kilter, Jako 2022

Tehnikaülikooli elektriala tudengid on Eesti parimad

Vaimann, Toomas; Kilter, Jako Elektriala 2021 / lk. 6-8 : ill https://www.ester.ee/record=b1240496*est

Temperature dependency of electrical network load

Meldorf, Mati; Treufeldt, Ülo; Kilter, Jako Oil shale 2007 / 2S, p. 237-247 : ill
https://www.researchgate.net/publication/228631520_Temperature_dependency_of_electrical_network_load

Testing of PMU-based transmission loss monitoring application

Löper, Mari; Tuttelberg, Kaur; Kilter, Jako 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology III" : Pärnu, Estonia, January 16-21, 2017 2017 / p. 121-124 : ill
http://www.ester.ee/record=b4650094*est

The development and assessment of HVAC cable models for electrical transmission network planning studies =

Kõrgepingeliste kaabelliinide mudelite arendamine ja analüüs elektrivõrgu planeerimisülesannete raamistikus

Kangro, Triin 2018 <https://digi.lib.ttu.ee/ii/?11205> https://www.ester.ee/record=b5181775*est

A tool for model-order reduction of power systems with high penetration of power electronic devices

Campos, Nathalia de Moraes Dias; Kilter, Jako 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 91-92 : ill
https://www.ester.ee/record=b5504019*est

Toward automated utility pole condition monitoring : a deep learning approach

Ramlal, Craig J.; Singh, Arvind; Rocke, Sean; Manninen, Henri; Kilter, Jako; Landsberg, Mart Proceedings of 2020 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 26-28 October, 2020 2020 / p. 255-259 <https://doi.org/10.1109/ISGT-Europe47291.2020.9248797>

Toward automatic condition assessment of high-voltage transmission infrastructure using deep learning techniques

Manninen, Henri; Ramlal, Craig J.; Singh, Arvind; Rocke, Sean; Kilter, Jako; Landsberg, Mart International journal of electrical power & energy systems 2021 / art. 106726 <https://doi.org/10.1016/j.ijepes.2020.106726> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tugevvoolupaigaldised nimivahelduvpingega üle 1 kV. Osa 1, Üldnõuded = Power installations exceeding 1 kV a.c. Part 1, Common rules (IEC 61936-1:2010, modified)

2011 https://www.ester.ee/record=b4279531*est

Type models of electrical network load

Meldorf, Mati; Kilter, Jako Oil shale 2009 / 3S, p. 243-253 : ill https://artiklid.elnet.ee/record=b1489919*est

Uncertainty propagation in PMU-based transmission line monitoring

Tuttelberg, Kaur; Kilter, Jako IET generation, transmission & distribution 2018 / p. 745-755 : ill <https://doi.org/10.1049/iet-gtd.2017.0244> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Use cases for power quality data analysis : case study for the Estonian transmission system

Domagk, Max; Meyer, Jan; **Kilter, Jako**; Maripuu, Rain 2024 21st International Conference on Harmonics and Quality of Power (ICHQP) : Oct. 15 to 18, 2024, Chengdu, China : proceedings 2024 / p. 485-490 <https://doi.org/10.1109/ICHQP61174.2024.10768779>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Using demand side management in energy-intensive industries for providing balancing power – the Estonian case study
Drovtar, Imre; Uuemaa, Priit; Rosin, Argo; Kilter, Jako; Valtin, Juhan 2013 IEEE Power and Energy Society General Meeting (PES), Vancouver, Canada, 21-25 July 2013 : proceedings 2013 / [5] p.: ill <https://ieeexplore.ieee.org/document/6672418>

Utilizing demand response in load modelling for voltage and reactive power control studies
Drovtar, Imre; Leinakse, Madis; Tuttelberg, Kaur; Kilter, Jako IEEE transactions on power systems 2024 / 12 p
<https://doi.org/10.1109/TPWRS.2024.3425157>

Uuenenud nõuded õhuliinidele. Standard EVS-EN 50341-2-20:2018
Kilter, Jako; Metusala, Tiit; Raesaar, Peeter Elektriala 2019 / lk. 22-23 : ill http://www.ester.ee/record=b1240496*est

Validation of full-converter wind power plant generic model based on actual fault ride-through measurements
Tšernobrovkin, Oleg; Perdana, Abram; Palu, Ivo; Kilter, Jako Journal of energy and power engineering 2010 / 4, p. 54-62

Variability of high voltage circuit breaker performance parameters for condition monitoring
Asefi, Sajjad; Kiitam, Ivar; Manninen, Henri; Kilter, Jako; Tealane, Marko; Landsberg, Mart International Conference on Condition Monitoring, Diagnosis and Maintenance 2023 - CMDM 2023 (7th edition), Bucharest, Romania, October 31th - November 2nd, 2023 : proceedings 2023 / p. 1-10

Weather dependency of corona losses on 330 kV overhead transmission lines
Gupta, Pradeep Kumar; Tuttelberg, Kaur; Kilter, Jako International journal of electrical power & energy systems 2024 / art. 109537 <https://doi.org/10.1016/j.ijepes.2023.109537> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The weather impact on corona losses of 330 kV aging transmission lines
Gupta, Pradeep Kumar; Tuttelberg, Kaur; Kilter, Jako IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863024>

Verification of a wind farm aggregated generic dynamic model based on a real fault ride-through test in the grid
Tšernobrovkin, Oleg; Perdana, Abram; Palu, Ivo; Kilter, Jako Proceedings of 5th Nordic Wind Power Conference 2009 2009 / [6] p <https://research.chalmers.se/en/publication/97817>

Verification of wind parks and their integration into small-interconnected power systems
Kilter, Jako; Landsberg, Mart; Palu, Ivo; Tšernobrovkin, Oleg IEEE PowerTech 2009 Conference : Bucharest, 28.06-02.07.2009 2009 / ? p

Wide-Area applications for enhancement of Estonian power system security
Kilter, Jako; Reinson, Andrus PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 143-148 : ill <https://ieeexplore.ieee.org/abstract/document/6256218>

Wind park and transmission network cooperation considering Grid Code requirements
Kilter, Jako; Dubbelman, Edgar; Palu, Ivo; Niitsoo, Jaan Electrical and Control Technologies : proceedings of the the 7th International Conference on Electrical and Control Technologies ECT-2012 2012 / p. 183-188 : ill
https://www.researchgate.net/publication/290252818_Wind_park_and_transmission_network_cooperation_considering_Grid_Code_requirements

Wind power integration in Estonia under planning contingencies
Tšernobrovkin, Oleg; Kilter, Jako; Reinson, Andrus; Ülavere, Eero 6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings 2008 / p. 113-118 : ill

Üle 1 kV nimivahelduvpingega tugevvoolupaigaldiste maandamine = Earthing of power installations exceeding 1 kV a.c.
2011 https://www.ester.ee/record=b2743091*est

XgBoost based short-term electrical load forecasting considering trends & periodicity in historical data
Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo; Jawad, Muhammad; Kilter, Jako; Martins, Joao 2023 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2023 / 6 p <https://doi.org/10.1109/ETFG55873.2023.10407926>