

## Projekta Izp-2018/1-0066 rezultāti

### Viedās enerģētikas stratēģiskā un operatīvā vadība (I-POWER)

*Oriģināli zinātniskie raksti, kas publicēti zinātniskos žurnālos, rakstu krājumos vai konferenču rakstu krājumos, kuri ir indeksēti datu bāzēs Web of Science Core Collection, SCOPUS vai ERIH PLUS*

1. Teremranova, J.; Mutule, A. Smart Approach to Management of Energy Resources in Smart Cities: Evaluation of Models and Methods. - 3rd International Conference on Smart and Sustainable Planning for Cities and Regions, Springer Science and Business Media Deutschland, 2021, [https://doi.org/10.1007/978-3-030-57332-4\\_1](https://doi.org/10.1007/978-3-030-57332-4_1)
2. Zalitis, I.; Dolgicers, A.; Kozadajevs, J. Influence Analysis of Mutual Coupling Effects between a High-Voltage Transmission Line and a Fibre-optic Cable with a Conductive Support Element. - 6th IEEE Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE), Vilnius, LITHUANIA, 2018, <https://doi.org/10.1109/AIEEE.2018.8592447>
3. Balputnis, K.; Petrichenko, R.; Sobolevsky, D. Heating demand forecasting with multiple regression: Model setup and case study. - 6th Workshop on Advances in Information, Electronic and Electrical Engineering, 2018, <https://doi.org/10.1109/AIEEE.2018.8592144>
4. Jasevics, A.; Zemite, L.; Petrichenko, L. A comparative assessment of the deployment of PV technologies in the baltics and in the european union. - 6th Workshop on Advances in Information, Electronic and Electrical Engineering, 2018, <https://doi.org/10.1109/AIEEE.2018.8592452>
5. Petrichenko, R.; Kozadajevs, J.; Petrichenko, L.; Silis, A. Reserve power estimation according to the Baltic power system 2050 development plan. - 7th IEEE International Energy Conference, 2022, <https://doi.org/10.1109/ENERGYCON53164.2022.9830517>
6. Petrichenko, R.; Petrichenko, L.; Sauhats, A.; Slivikas, A.; Gudzius, S.; Zima-Bockarjova, M. Profitability Study of Floating PV and Storage Pumped Hydropower Plant. - 17th International Conference on the European Energy Market, 2020, <https://doi.org/10.1109/EEM49802.2020.9221983>
7. Kurevska, L.; Sauhats, A.; Junghans, G.; Lavrinovcs, V. Harmonization of Imbalance Settlement Period Across Europe: The Curious Case of Baltic Energy Markets. - 60th IEEE Annual International Scientific Conference on Power and Electrical Engineering of Riga Technical University, 2019, <https://doi.org/10.1109/RTUCON48111.2019.8982334>
8. Kurevska, L.; Sauhats, A.; Junghans, G.; Lavrinovcs, V. Measuring the impact of demand response services on electricity prices in Latvian electricity market. - 61st Annual IEEE



International Scientific Conference on Power and Electrical Engineering of Riga Technical University, 2020, <https://doi.org/10.1109/RTUCON51174.2020.9316485>

9. Lazdins, R.; Mutule, A. Operational Algorithm for Natural Gas Boiler and Heat Pump System Optimization with PV Panel. - 61st Annual IEEE International Scientific Conference on Power and Electrical Engineering of Riga Technical University, 2020, <https://doi.org/10.1109/RTUCON51174.2020.9316571>
10. Lazdins, R.; Mutule, A.; Kairisa, E. Feasibility Study in Energy Community Business Model Development for Latvia. - 62nd IEEE International Scientific Conference on Power and Electrical Engineering of Riga Technical University, 2021, <https://doi.org/10.1109/RTUCON53541.2021.9711730>
11. Sauhats, A.; Petrichenko, R.; Petrichenko, L.; Silis, A.; Komarovs, R. The assessment of the impact of electric vehicles on the power balance of the Baltic energy system. - 62nd IEEE International Scientific Conference on Power and Electrical Engineering of Riga Technical University, 2021, <https://doi.org/10.1109/RTUCON53541.2021.9711587>
12. Gubin, P. Y.; Oboskalov, V. P.; Mahnitko, A.; Petrichenko, R. Simulated annealing, differential evolution and directed search methods for generator maintenance scheduling. – Energies, 2020, 13 (20), <https://doi.org/10.3390/en13205381>
13. Lazdins, R.; Mutule, A.; Zalostiba, D. PV energy communities—challenges and barriers from a consumer perspective: A literature review. – Energies, 2021, 14 (16), <https://doi.org/10.3390/en14164873>
14. Sauhats, A.; Zemite, L.; Petrichenko, L.; Moshkin, I.; Jasevics, A. A estimating the economic impacts of net metering schemes for residential PV systems with profiling of power demand, generation, and market prices. – Energies, 2018, 11 (11), <https://doi.org/10.3390/en11113222>
15. Zima-Bockarjova, M.; Sauhats, A.; Petrichenko, L.; Petrichenko, R. Charging and discharging scheduling for electrical vehicles using a shapley-value approach. – Energies, 2020, 13 (5), <https://doi.org/10.3390/en13051160>
16. Deshko, V. I.; Zamulko, A. I.; Karpenko, D. S.; Mahnitko, A.; Linkevics, O.; Ieee. Evaluation of the district heating market efficiency as the function of its size and number of competing suppliers. - 59th International Scientific Conference on Power and Electrical Engineering of Riga-Technical-University (RTUCON), Riga Tech Univ, Riga, LATVIA, Nov 12-13, 2018, <https://doi.org/10.1109/RTUCON.2018.8659907>

17. Kozadajevs, J.; Dolgicers, A.; Boreiko, D.; Zalitis, I.; ieee. Heat consumption modelling and optimisation for power substations. - 59th International Scientific Conference on Power and Electrical Engineering of Riga-Technical-University (RTUCON), Riga Tech Univ, Riga, LATVIA, Nov 12-13, 2018, <https://doi.org/10.1109/RTUCON.2018.8659891>
18. Petrichenko, L.; Sauhats, A.; Petrichenko, R.; Bezrukova, D.; ieee. Long-Term Price Forecasting for the Cost-Benefit Analysis of Power Equipment. - 59th International Scientific Conference on Power and Electrical Engineering of Riga-Technical-University (RTUCON), Riga Tech Univ, Riga, LATVIA, Nov 12-13, 2018, <https://doi.org/10.1109/RTUCON.2018.8659888>
19. Rubcovs, S. Complex analysis of the oscillograms of the full-scale experiment in the latvian power system for the creation and automatic prevention of artificial asynchronous regime. - 59th International Scientific Conference on Power and Electrical Engineering of Riga-Technical-University (RTUCON), 2018, <https://doi.org/10.1109/RTUCON.2018.8659822>
20. Sadovica, L.; Junghans, G.; Sauhats, A.; Broka, Z.; Baltputnis, K.; Lavrinovics, V.; ieee. Case study - Assessing Economic Potential for Demand Response in Baltic Balancing Market. - 59th International Scientific Conference on Power and Electrical Engineering of Riga-Technical-University (RTUCON), 2018, <https://doi.org/10.1109/RTUCON.2018.8659901>
21. Survilo, J.; Petrichenko, L.; ieee. Expedience and Possibilities of Implementation of HV Single-transformer Substations - 59th International Scientific Conference on Power and Electrical Engineering of Riga-Technical-University (RTUCON), 2018; <https://doi.org/10.1109/RTUCON.2018.8659896>.
22. Zemite, L.; Petrichenko, L.; Sauhats, A.; Jasevics, A.; ieee. Small-Scale Renewable Generation Support in Latvia. - 59th International Scientific Conference on Power and Electrical Engineering of Riga-Technical-University (RTUCON), 2018; <https://doi.org/10.1109/RTUCON.2018.8659904>
23. Petrichenko, L.; Sauhats, A.; Diahovchenko, I.; Segeda, I. Economic Viability of Energy Communities versus Distributed Prosumers. – Sustainability, 2022, 14 (8), <https://doi.org/10.3390/su14084634>
24. Klavina-Makrecka, S.; Jasevičs, A.; Zemite, L. Evaluation of economic benefits and health hazards of small wind turbines: Case study of Latvia - 21st IEEE International Conference on Environment and Electrical Engineering and 2021 5th IEEE Industrial and Commercial Power System Europe, EEEIC / I and CPS Europe 2021, <https://doi.org/10.1109/EEEIC/ICPSEurope51590.2021.9584516>
25. Kobzars, V.; Zemite, L.; Jasevics, A.; Kleperis, J.; Dimanta, I.; Knoks, A.; Lesnicenoks, P. Appropriateness of Hydrogen Production in Low-Power Hydropower Plant - 62nd IEEE



International Scientific Conference on Power and Electrical Engineering of Riga Technical University, 2021, <https://doi.org/10.1109/RTUCON53541.2021.9711687>

26. Smats, A.; Zemite, L.; Jasevics, A. Optimization of renewable energy cost in the training center and integration of production into the competence training process. - 62nd IEEE International Scientific Conference on Power and Electrical Engineering of Riga Technical University, 2021, <https://doi.org/10.1109/RTUCON53541.2021.9711705>
27. Diahovchenko, I.; Petrichenko, L.; Sauhats, A. Energy Losses in Power Distribution Systems: PV Roof Prosumers vs. Energy communities. - 62nd IEEE International Scientific Conference on Power and Electrical Engineering of Riga Technical University, 2021, <https://doi.org/10.1109/RTUCON53541.2021.9711684>